Rules, Expectations & Security through
Privacy-Enhanced Convenient Technologies

The citizens' perspective: Awareness, feelings and acceptance of surveillance and surveillance systems for fighting crime in Malta. A quantitative study.

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0. Executive Summary

This document presents the results for Malta within the framework of a larger study undertaken as part of the RESPECT project. Analyses are based on a survey regarding the perceptions, feelings, attitudes and behaviours of citizens towards surveillance for the purpose of fighting crime, carried out amongst a quota sample that is representative of the population in Malta for age and gender (based on Eurostat data of 12/2012). Responses were gathered, predominantly, through an online survey supplemented by a number of questionnaires administered in face to face interviews, in order to fulfil the quota and also reach those citizens who do not use the internet. The questionnaire consisted of 50 questions and was available online in all languages of the European Union between November 2013 and March 2014. The face to face interviews were carried out between February and March 2014. The Maltese sample is based on the responses from 260 individuals who indicated Malta as their country of residence in the online survey or were administered the questionnaire face to face.[1]

Generally, the data reveal a rather large spread in the Maltese respondents' knowledge of different types of surveillance and surveillance technologies, with CCTV (96%) being the type most respondents have heard of and the surveillance of "suspicious" behaviour (37%) the least known. Most respondents also indicated that they know of a number of reasons for the setting up of surveillance, ranging between 89% for the detection of crime and 47% for the control of crowds. Most respondents think that surveillance is taking place in the country where they live, but more than half of the respondents felt that they do not know about the economic costs of surveillance.

All types of surveillance being investigated (CCTV, surveillance using databases containing personal information, surveillance of online social networks, surveillance of financial transactions, and geolocation surveillance) were perceived as more useful than not useful for the reduction, detection or prosecution of crime, with the highest mean score[2] for CCTV (4.49) and the lowest for database surveillance (3.24). Surveillance was perceived as being most useful for the prosecution of crime and least useful for the reduction of crime. The results for perceived effectiveness of the different types of surveillance in protecting against crime follow the same pattern of results as for perceived usefulness of the same types of surveillance. Generally, though, the different types of surveillance are perceived as less effective in the protection against crime than they are deemed useful for the reduction, detection, and prosecution of crime, and different acceptance levels in different locations point at acceptance of surveillance rather being related to respondents having become accustomed to surveillance in city centres and urban areas.

A considerable number of Maltese respondents appear to have two distinct, and very different, reactions to surveillance. Some people feel secure in the presence of surveillance, but in others surveillance produces feelings of insecurity. Regarding the respondents' feelings about personal information gathered through surveillance, respondents feel generally a strong lack of control over processing of personal information gathered via surveillance, irrespective of whether it has been gathered by government agencies or by private companies. Additionally, there is a visible lack of trust in both private companies and government agencies being able to protect personal information gathered via surveillance, with more mistrust towards private companies than towards government agencies. Consequently, there may not only be a missing link between surveillance and feelings of security, but also perceptions of a substantial lack of data protection in connection with personal information gathered through surveillance.

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[1] The overall Maltese sample consists of 330 respondents. However, due to the fact that most responses were collected through an online survey, in some of the age/gender subgroups more responses were collected than were needed to complete the quota. In such cases, the questionnaires to be used were randomly selected from amongst the responses collected for that subgroup.

[2] On a scale from 1 to 5, with 1=not useful at all, and 5=very useful.

Generally (i.e., with the exception of CCTV cameras), the majority of respondents feel more unhappy than happy with the different types of surveillance, and they also feel more unhappy than happy about surveillance taking place without people knowing about it.

The majority of Maltese respondents agreed more than disagreed that all types of surveillance investigated (except CCTV) have a negative impact on one's privacy. The strongest negative impact on privacy was perceived for surveillance using databases containing personal information. Moreover, only very few respondents are willing to accept financial compensation in exchange for surveillance measures that would involve greater invasion of privacy (between 11% for geolocation surveillance and 16% for surveillance utilising databases containing personal information).

The sharing of information gathered through surveillance by government agencies with other government agencies, or with foreign governments, is deemed acceptable by the majority of respondents if the citizen is suspected of wrong-doing. However, most of these respondents believe it is necessary that the surveillance needs to be legally authorised for it to be acceptable,and sharing information with private companies is much less acceptable even if surveillance has been lawfully authorised. An even lower number of respondents find it fully acceptable, or acceptable even if the citizen is suspected of wrong-doing, for private companies to share a citizen's personal information. Generally, there is a considerable number of respondents who feel that, unless information or consent has been given, private information should "stay private".

Protection of the individual and, in particular, protection of the community were perceived as social benefits of surveillance. But risks ("social costs") associated with surveillance seemed to be even more keenly felt. The highest risks were perceived to be misuse of information (mean score 6.04[3]), misinterpretation (5.94) and privacy invasion (5.81) arising from surveillance, followed by loss of control over the usage of one's personal data gathered via surveillance. Discrimination, stigma, and the limitation of citizen rights as consequences of surveillance appear also to be of concern, though not at the same level. However, there has been very little change in personal behaviour as a consequence of awareness of surveillance. A majority of respondents have stopped accepting discounts in exchange for personal data (55%[4]), about half of the respondents have kept themselves informed about technical possibilities to protect their personal data, but few have restricted their activities or the way they behave (25%[3]), or avoided locations or activities that they suspect are under surveillance (12%[3]).

There were a number of significant gender differences. Female respondents had heard less of some types of surveillance technologies and the reasons for the setting up of surveillance, and were less aware of whether surveillance of online social networking is taking place, but they perceived surveillance of online social networking for the purpose of detection and prosecution of crime (as well as geolocation surveillance for the detection of crime) to be more useful than male respondents. But there were no gender differences in the perceived usefulness and effectiveness of surveillance measures, feelings of security due to the presence of surveillance, control over one's personal information gathered via surveillance measures, or trust that one's personal information is protected. On the other side, male respondents were generally more unhappy than females with surveillance measures, and males perceived that CCTV and geolocation surveillance has a negative impact on privacy more than female respondents.

[3] On a scale from 1 to 7, with 1=disagree, and 7=agree.
[4] Answers 5, 6 or 7 on a scale from 1 to 7, with 1=disagree and 7=agree.

A couple of patterns can be identified with regards to age. Respondents aged 65+ indicated less knowledge of some types of surveillance and of some reasons for the setting up of surveillance, they showed less awareness whether surveillance is taking place in the country where they live, and they adapted their behaviour to mitigate the risks perceived less often than younger respondents. At the same time though, there are very few significant differences between age groups when it comes to perceptions of usefulness and effectiveness of these surveillance measures, perceived privacy impact, and related feelings such as security, control, trust and general happiness. This result suggests that, in Malta, other factors rather than age-related levels of knowledge play a role in the citizens' feelings and perceptions towards surveillance.

To summarise, the Maltese respondents indicated a strongly felt lack of trust in the protection of, and control over, personal information gathered via surveillance. A majority also feel more unhappy than happy with the different types of surveillance (except CCTV). Additionally, there is a link between feeling happy, or unhappy, about surveillance and feeling secure or insecure through the presence of surveillance. A large number of Maltese respondents appear to have two distinct, and very different, reactions to surveillance. Some people feel secure in the presence of surveillance, but in others surveillance produces feelings of insecurity. However, analyses also indicate that increasing the perceived effectiveness of laws regarding the protection of personal data gathered via surveillance, more than increasing the effectiveness of surveillance measures itself, may make citizens feel more secure.

Further research is needed to disentangle the relationships between surveillance measures, feelings of security or insecurity, and citizens' general quality of life feelings.

1. Introduction

The analyses and results in this document are based on a survey regarding the perceptions, feelings, attitudes and behaviour of European citizens towards surveillance for the purpose of fighting crime. This study was undertaken as part of the RESPECT project – "Rules, Expectations and Security through Privacy-enhanced Convenient Technologies" (RESPECT; G.A. 285582) – which was co-financed by the European Commission within the Seventh Framework Programme (2007-2013). Quota samples were used for each RESPECT partner country which were based on demographic data retrieved from the Eurostat statistics of December 2012.[5] Responses were gathered, predominantly, through an online survey supplemented by a number of questionnaires administered in face to face interviews, in order to fulfil quotas and reach those citizens who do not use the internet. The survey consisted of 50 questions and sub-questions, and was available online in all languages of the European Union from November 2013 until March 2014.[6] A snowball technique was used to promote the study and disseminate links to the questionnaire. Most RESPECT partners placed advertisements on their respective university/institute website and those of related institutions, sent out press releases and placed banners or advert links in local online newspapers or magazines, posted links to the questionnaire on social networking websites, sent the link out in circular emails (e.g., to university staff and students), and used personal and professional contacts to promote the survey. In order to achieve the quota a number of questionnaires were administered in face to face interviews. Typically, these face to face interviews were required for the older age groups as internet usage is not as common amongst older citizens as it is with the younger population.

Overall, 5,361 respondents from 28 countries completed the questionnaire. This total sample shows a very even gender and age distribution, which is unsurprising given that target quotas were set for each RESPECT partner country. The Maltese sample used for this analysis is based on the responses from 260 individuals who indicated the Malta as their country of residence in the online survey or were administered the questionnaire face to face. The sample has a gender distribution of 51.2% females and 48.8% males, and an age distribution (see figure 1 below) that represents the slightly aging population in this country.

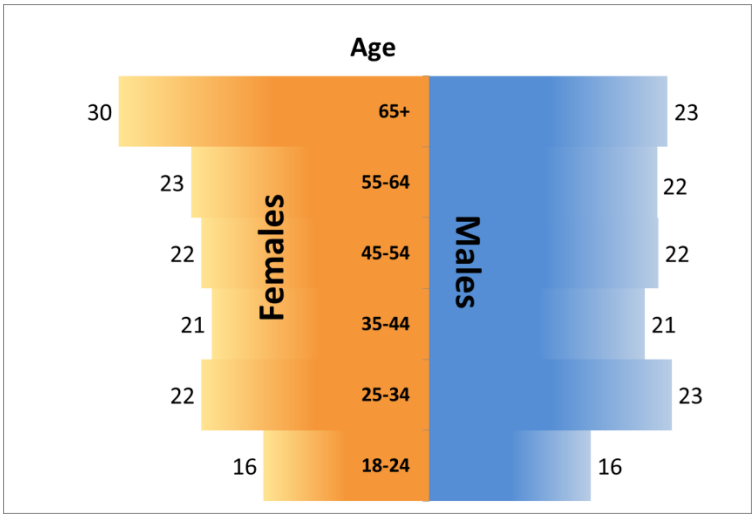

Figure 1: Age and gender distribution of Maltese quota sample

Not fully satisfactory is the high level of education of the majority of respondents (80% with tertiary or post-graduate education). However, this was to be expected due to the majority of responses being collected online as well as several of the recruiting institutions being academic entities, and it coincides with the education level of

[5] Source: http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/main_tables.
[6] The English version of this this questionnaire may be seen in Appendix B.

respondents in the total RESPECT sample (73%). Regarding specific demographic data related to aspects of surveillance, 10% of Maltese respondents (16% of total sample) felt that they were living in an area with increased security risks, 44% (53% total sample) indicated that they usually travel abroad at least twice per year, and 63% (71% total sample) responded that they usually visited a mass event at least twice per year. Therefore, it can be assumed that the majority of respondents are frequently exposed to a variety of surveillance measures that are intended to fight crime.

This report presents results on citizens' perceptions, awareness, acceptance of, and feelings towards, surveillance, and the potential relationships between these factors. Furthermore, separate analyses are dedicated to the social and economic costs of surveillance – covering also the additional aspect of behaviour and behavioural intentions – which are specific tasks within the RESPECT project. Another separate section focuses on how the results on various aspects of surveillance vary with age; gender aspects are discussed throughout all sections alongside the general results.

2. Citizens' knowledge of surveillance

2.1 Awareness of different types of surveillance

Generally, there can be observed a rather large spread in the awareness of different types and technologies of surveillance. Almost all Maltese respondents (96.2%) indicated that they have heard of CCTV, whereas just above a third (36.9%) had heard of the surveillance of "suspicious" behaviour. A split by gender shows some significant differences, with male respondents indicating a greater awareness in particular regarding Electronic tagging / Radio Frequency Identification (difference between male and female responses: 17.5 percentage points), the surveillance of data and traffic on the internet (difference of 15 percentage points), surveillance via Global Positioning Systems (difference of 13.9 percentage points) and the surveillance of online communication (difference of 9.4 percentage points).

Table 1
Knowledge of types of surveillance

		Answer = YES		
		Total	**Female**	**Male**
Q1_1	**Biometric data**, e.g. analysis of fingerprints, palm prints, facial or body features	85.8%	82.0%	89.8%
Q1_2	**"Suspicious" behaviour**, e.g. automated detection of raised voices, facial or body features	36.9%	36.1%	37.8%
Q1_3	**Data and traffic on the internet**, e.g. Deep Packet/Content inspection	59.2%	51.9%	66.9%*
Q1_4	**Databases** containing personal information, e.g. searching state pension databases, or customer databases of private companies	82.3%	81.2%	83.5%
Q1_5	**Online communication**, e.g. social network analysis, monitoring of chat rooms or forums	85.8%	81.2%	90.6%*
Q1_6	**Telecommunication**, e.g. monitoring of phone calls or SMS	92.3%	90.2%	94.5%
Q1_7	**Electronic tagging / Radio Frequency Identification** (RFID), e.g. tracking geolocation with electronic chips implanted under the skin or in bracelets	61.2%	52.6%	70.1%*
Q1_8	**Global Positioning Systems** (GPS), e.g. tracking geolocation of cars or mobile phones	83.5%	76.7%	90.6%*
Q1_9	**CCTV cameras**, e.g. in public places, airports or supermarkets	96.2%	95.5%	96.9%
Q1_10	**Financial information**, e.g. tracking of debit/credit card transactions	82.7%	79.7%	85.8%

Q1: Have you ever heard of the use of any of the below for the purpose of monitoring, observing or tracking of people's behaviour, activities or personal information?
Note: Results in this table marked with an asterisk (*) signify that the results between males and females are statistically significantly different (p<.05). Other differences between males and females are not statistically significant.

However, these differences found may also be partially related to gender-specific interpretations of the question, given that "have you ever heard of" does not necessarily request firm knowledge, and responses may as well reflect gender-specific self-constructions of "being knowledgeable in technologies".

2.2 Known reasons for surveillance

Most respondents are aware of the main reasons for deploying surveillance. The reason for surveillance that is most known about is the detection of crime (89.2%), and the least known is the use of surveillance for control of crowds

(47.3%). There are, again, some statistically significant gender differences in knowing of the reasons for surveillance specifically asked for, with male respondents indicating significantly more often (difference between 8.7 and 21.5 percentage points) that they know of the various reasons for surveillance investigated (with the exception of reduction of crime).

Table 2

Known reasons for surveillance

		Answer=YES		
		Total	**Female**	**Male**
Q2_1	The reduction of crime	80.0%	78.2%	81.9%
Q2_2	The detection of crime	89.2%	85.0%	93.7%*
Q2_3	The prosecution of crime	72.7%	66.9%	78.7%*
Q2_4	Control of border-crossings	67.7%	60.2%	75.6%*
Q2_5	Control of crowds	47.3%	36.8%	58.3%*
Q2_6	Other	16.9%	12.0%	22%*
Q2_7	I don't know of any reasons.	2.7%	3.8%	1.6%

Q2: What reasons for the setting up of surveillance do you know of?

Note: Results in this table marked with an asterisk (*) signify that the results between males and females are statistically significantly different (p<.05). Other differences between males and females are not statistically significant.

3. Perceived usefulness and effectiveness of surveillance

3.1 Perceived usefulness

CCTV is perceived are more useful than the other four types of surveillance investigated (surveillance using databases containing personal information, surveillance of online social networks, surveillance of financial transactions, and geolocation surveillance) for the reduction, detection, and prosecution of crime. Generally, the five types of surveillance were perceived to be most useful for the prosecution of crime, slightly less useful for the detection of crime, and slightly less useful still for the reduction of crime. Generally, though, all five types of surveillance are perceived to be more useful than not useful for the detection, prosecution, and reduction of crime (mean result in all categories is above the midpoint of 3.00 in Table 3).

CCTV is perceived to be the most useful of the different types of surveillance, followed by geolocation surveillance and financial tracking. Surveillance of online social networking and surveillance using databases containing personal information were perceived to be the least useful. Significant gender differences were only found for the perceived usefulness of surveillance of online social networking (for the purpose of detection and prosecution of crime), and for the perceived usefulness of geolocation surveillance (for the purpose of detection of crime). There, female respondents perceived the usefulness of surveillance significantly higher than male respondents.

Table 3

Perceived usefulness of surveillance

		Total		Female		Male	
Q3.1	**the reduction of crime**	**Mean**	**STD**	**Mean**	**STD**	**Mean**	**STD**
Q3.1_1	CCTV cameras	4.31	0.997	4.39	0.930	4.23	1.060
Q3.1_2	Surveillance using databases containing personal information	3.24	1.364	3.22	1.413	3.25	1.322
Q3.1_3	Surveillance of online social networking	3.40	1.285	3.51	1.219	3.30	1.342

Q3.1_4	Surveillance of financial transactions	3.82	1.157	3.87	1.136	3.76	1.179
Q3.1_5	Geolocation surveillance	3.83	1.213	3.92	1.151	3.73	1.268
Q3.2	**the detection of crime**						
Q3.2_1	CCTV cameras	4.45	0.917	4.46	0.938	4.44	0.899
Q3.2_2	Surveillance using databases containing personal information	3.41	1.267	3.47	1.305	3.35	1.231
Q3.2_3	Surveillance of online social networking	3.64	1.237	3.80	1.191	3.47*	1.266
Q3.2_4	Surveillance of financial transactions	4.01	1.083	4.11	1.048	3.92	1.112
Q3.2_5	Geolocation surveillance	3.98	1.164	4.15	1.091	3.8*	1.210
Q3.3	**the prosecution of crime**						
Q3.3_1	CCTV cameras	4.49	0.893	4.52	0.903	4.46	0.884
Q3.3_2	Surveillance using databases containing personal information	3.65	1.286	3.72	1.313	3.58	1.261
Q3.3_3	Surveillance of online social networking	3.69	1.227	3.91	1.156	3.48*	1.259
Q3.3_4	Surveillance of financial transactions	4.13	1.127	4.24	1.016	4.03	1.221
Q3.3_5	Geolocation surveillance	4.23	1.018	4.28	1.005	4.17	1.032

Q3: How useful in general do you think the following types of surveillance are for […] (1=not useful at all; 5=very useful)
Note: Results in this table marked with an asterisk (*) signify that the results between males and females are statistically significantly different (p<.05). Other differences between males and females are not statistically significant.

The potential relationships between the perceived usefulness of different types of surveillance for the reduction, detection and prosecution of crime were examined (See Table A3 in Appendix A). It appears that there is a relationship between beliefs about the usefulness of the various types of surveillance for different purposes. For example, if a respondent perceives surveillance using databases containing personal information as useful for the reduction of crime then the respondent is also likely to perceive this form of surveillance as useful for the detection of crime and prosecution of crime. There is a similar pattern of responses for all types of surveillance: The relationship between perceived usefulness for reduction of crime and perceived usefulness for detection was strongest for the surveillance of databases containing personal information, the surveillance of online social networking, and geolocation surveillance; for CCTV and surveillance of financial transactions the strongest relationship was found between the perceived usefulness for detection and the usefulness for prosecution of crime. This pattern of responses suggests that the concepts of reduction, detection, and prosecution of crime may be somewhat entangled. However, it is also possible that some respondents decided on a general "usefulness setting" for each type of technology and answered the questions on the reduction, detection, and prosecution of crime in the same way. The overall closest relationship was found for surveillance of online social networking sites between its usefulness for reduction and its usefulness for detection of crime. There were also strong links between the perceived usefulness of surveillance using databases containing personal information for all three purposes (reduction, detection, prosecution of crime). Whilst this type of surveillance as well as the surveillance of social networking sites are believed to be considerably less useful by respondents than the others (CCTV, financial tracking, and geolocation surveillance), this relationship between perceived usefulness in different situations may point at respondents not only having a somewhat blurred picture of these forms of surveillance, but also being under-informed. Furthermore, strong relationships are observed between the perceived usefulness of surveillance using databases containing personal information for the prosecution of crime and the perceived usefulness of surveillance of social networking sites and surveillance of financial transactions for the same purpose. A similar, though less strong, relationship is present between the perceived usefulness of these types of surveillance for the reduction and the detection of crime. This may, again, be the result of some respondents not distinguishing much between the different types of surveillance and rather focusing on the usefulness of surveillance generally for different purposes.

There is no correlation between the knowledge of general purposes of surveillance, and the assumed usefulness of specific types of surveillance for these purposes. A reason for this missing link may be that surveillance still represents a somewhat abstract concept for the majority of citizens. To imagine specific purposes, these need to be linked to specific types, technologies or measures of surveillance.

3.2 Effectiveness in protection against crime

The results for perceived effectiveness of the different types of surveillance in protecting against crime follow the same pattern of results as for perceived usefulness of the same types of surveillance in the reduction, detection, and prosecution of crime. However, the different types of surveillance are generally perceived to be less effective in protection against crime than they are deemed to be useful for the reduction, detection, and prosecution of crime. Between 80%[7] (reduction of crime) and 82%[8] (detection of crime) of respondents believed that CCTV is useful, but only 75%[9] of respondents agreed that it is effective. CCTV is perceived to be the most effective surveillance measure in protection against crime, followed by geolocation surveillance, surveillance of financial transactions and surveillance of online social-networking. Surveillance using databases containing personal information is not seen as a particularly effective method of protection against crime.

Table 4

Perceived effectiveness of surveillance

		Total		Female		Male	
Q5.1.1	**Effectiveness (1=disagree; 7=agree)**	**Mean**	**STD**	**Mean**	**STD**	**Mean**	**STD**
Q5.1.1_1	CCTV is an effective way to protect against crime	5.64	1.499	5.65	1.518	5.62	1.485
Q5.1.1_2	Surveillance utilising databases containing personal information is an effective way to protect against crime	3.74	1.806	3.59	1.862	3.89	1.747
Q5.1.1_3	Surveillance of online social-networking is an effective way to protect against crime	4.01	1.890	4.14	1.841	3.89	1.934
Q5.1.1_4	Surveillance of financial transactions is an effective way to protect against crime	4.62	1.806	4.70	1.761	4.54	1.852
Q5.1.1_5	Geolocation surveillance is an effective way to protect against crime.	4.74	1.788	4.79	1.831	4.70	1.751

Q5.1.1: How much do you agree or disagree with the following statements […] (1=disagree; 7=agree)
Note: Results in this table marked with an asterisk (*) signify that the results between males and females are statistically significantly different (p<.05). Other differences between males and females are not statistically significant.

3.3 Relationship between perceived usefulness and effectiveness

There is, mostly, a clear relationship between the perceived usefulness of a type of surveillance in the reduction, detection, and prosecution of crime and the perceived effectiveness of that type of surveillance in the protection against crime (see Table A22 in Appendix A). The strongest relationship for most types of surveillance is found between perceived usefulness in detection of crime and perceived effectiveness in the protection against crime.

[7] Answers 4 or 5 on a scale from 1 to 5, with 1=not useful at all and 5=very useful.
[8] Answers 4 or 5 on a scale from 1 to 5, with 1=not useful at all and 5=very useful.
[9] Answers 5, 6 or 7 on a scale from 1 to 7, with 1=disagree and 7=agree.

This was the case for surveillance of online social-networking, surveillance using databases containing personal information, and CCTV. In the case of geolocation surveillance and the surveillance of financial transactions, the perceived effectiveness of these modes of surveillance as a means to protect against crime was related most closely with its perceived usefulness in reduction of crime.

4. Perceptions of surveillance

4.1 Surveillance and feelings of security

As seen in the previous section, most of the different types of surveillance are perceived as useful in the reduction, detection, and prosecution of crime and, though at a somewhat lower level, effective in the protection against crime. However, there is high variability in responses on whether the presence of surveillance produces feelings of security (see Table 5 in next section). For just under a third of respondents (30%), the presence of surveillance makes them feel secure (4 or 5 on a 5-point scale, with 1=very insecure and 5=very secure). But an almost equal number of respondents (26%) feel insecure (1 or 2 on a 5-point scale, with 1=very insecure and 5=very secure) when surveillance is present. The remaining respondents indicated either the mid-point of the scale (38%), or "I don't know" (6%). This points to there being potentially two distinct, and very different, reactions to surveillance. Some people feel secure in the presence of surveillance, but in others surveillance produces feelings of insecurity.

4.2 Personal information collected through surveillance

Respondents generally feel a strong lack of control over the processing of personal information gathered via surveillance, irrespective of whether it has been gathered by government agencies or by private companies. There is also a visible lack of trust in both private companies and government agencies being able to protect personal information gathered via surveillance, but with more mistrust towards private companies than towards government agencies. Consequently, there may not only be a missing link between surveillance and security, but also perceptions of a substantial lack of data protection in connection with personal information gathered through surveillance. The only statistically significant gender difference could be found in female respondents showing less mistrust towards private companies than male respondents.

Table 5
Feelings of security, control and trust

		Total		Female		Male	
4.3	**Security (1=very insecure; 5=very secure)**	**Mean**	**STD**	**Mean**	**STD**	**Mean**	**STD**
	How secure does the presence of surveillance measures make you feel	3.08	1.092	3.17	1.125	2.99	1.055
4.4	**Control (1= no control; 5=full control)**						
4.4.1	Control over processing of personal information gathered via government agencies	1.76	0.989	1.71	0.933	1.82	1.043
4.4.2	Control over processing of personal information gathered via private companies	1.87	0.993	1.88	1.039	1.85	0.949
4.5	**Trust (1=no trust; 5=complete trust)**						
4.5.1	Trust into government that they protect personal information	2.18	1.062	2.27	1.045	2.09	1.075
4.5.2	Trust into private companies that they protect personal information	1.87	0.891	1.98	0.830	1.75*	0.937

Note: Results in this table marked with an asterisk (*) signify that the results between males and females are statistically significantly different (p<.05). Other differences between males and females are not statistically significant.

4.3 "Happiness" with surveillance

With the exception of CCTV cameras, the majority of respondents feel more unhappy than happy with the different types of surveillance. They appear to feel most unhappy with surveillance using databases containing personal information (mean score 3.61, respondents feeling more unhappy than happy 49%[10], respondents feeling more happy than unhappy 14%[11]). Particularly in the case of surveillance of financial transactions and geolocation surveillance, the distribution between participants feeling more unhappy and those feeling more happy is fairly even (difference of 5 to 7 percentage points, with slightly more participants feeling more unhappy than happy), and a considerable number of respondents (40%) feel neither happy nor unhappy about this. Most unhappy respondents are with surveillance taking place without people knowing about it (55% more unhappy, 11% more happy). In the case of surveillance of online social networks, surveillance using databases containing personal information and geolocation surveillance, female respondents feel significantly less unhappy than male respondents.

[10] Scores 4 and 5 on a scale from 1=very happy to 5=very unhappy.
[11] Scores 1 and 2 on a scale from 1=very happy to 5=very unhappy.

Table 6

Happiness with surveillance

		Total		Female		Male	
5.3_1	Feel happy/unhappy about CCTV cameras	2.46	1.035	2.37	1.034	2.56	1.031
5.3_2	Feel happy/unhappy about surveillance of online social networks	3.33	1.121	3.17	1.130	3.49*	1.092
5.3_3	Feel happy/unhappy about surveillance using databases	3.61	1.086	3.46	1.020	3.77*	1.131
5.3_4	Fee happy/unhappy about surveillance of financial transactions	3.17	1.098	3.18	1.130	3.15	1.070
5.3_5	Feel happy/unhappy about geolocation surveillance	3.18	1.026	3.03	1.021	3.32*	1.014
5.4	Feel happy/unhappy about surveillance taking place without noticing	3.74	1.073	1.03	1.131	3.80	1.114

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Q5.3: How happy do you feel about the following types of surveillance […] (1=very happy; 5=very unhappy)
Q5.4: How happy do you feel about surveillance taking place without being aware of it? (1=very happy; 5=very unhappy)
Note: Results in this table marked with an asterisk (*) signify that the results between males and females are statistically significantly different (p<.05). Other differences between males and females are not statistically significant.

4.4 Relationship between security and happiness

There are moderate to strong correlations between citizens' feelings of being happy, or unhappy, with different types of surveillance (see table A23 in Appendix A). For example, respondents who are happy or unhappy with surveillance using databases containing personal information are also happy or unhappy with social-networking surveillance, surveillance of financial transactions and geolocation surveillance. As was the case in Section 3.1 above, this may be the result of several respondents not distinguishing much between the different types of surveillance.

There is also a, though mostly weaker, relationship between generally feeling happy or unhappy about different types of surveillance and being happy or unhappy with surveillance taking place without one's knowledge, in particular for the surveillance using databases containing personal information. However, being happy or unhappy with different types of surveillance is only weakly related to feelings of security as a consequence of the presence of surveillance. Similarly, weak to very weak is the link between being happy or unhappy with the different types of surveillance and the perceived usefulness of this type of surveillance for the reduction, detection and prosecution of crimes (see table A9 in Appendix A).

4.5 Surveillance and privacy

Table 7
Perceptions of privacy

5.1.2	Privacy (1=disagree; 7=agree)	Total		Female		Male	
		Mean	STD	Mean	STD	Mean	STD
5.1.2_1	CCTV has a negative impact on one's privacy	3.63	2.182	3.32	2.153	3.94*	2.174
5.1.2_2	Surveillance via databases has a negative impact on one's privacy	4.82	2.059	4.57	2.057	5.06	2.039
5.1.2_3	Surveillance of online social networks has a negative impact on one's privacy	4.55	2.17	4.34	2.244	4.77	2.080
5.1.2_4	Surveillance of financial transactions has a negative impact on one's privacy	4.46	2.098	4.26	2.181	4.66	1.999
5.1.2_5	Geolocation surveillance has a negative impact on one's privacy	4.56	2.102	4.27	2.143	4.85*	2.028

Q5.1.2: How much do you agree or disagree with the following statements […] (1=disagree; 7=agree)
Note: Results in this table marked with an asterisk (*) signify that the results between males and females are statistically significantly different (p<.05). Other differences between males and females are not statistically significant.

The majority of respondents agreed more than disagreed that most types of surveillance (all except CCTV) have a negative impact on one's privacy, with male respondents feeling this negative impact (in the case of CCTV and geolocation surveillance) to be significantly stronger than female respondents (Table 7). The highest negative impact on privacy was perceived for surveillance using databases containing personal information. Irrespective of their views on the impact of different types of surveillance on privacy, very few respondents, both male and female, are willing to accept financial compensation in exchange for surveillance measures that would involve greater invasion of privacy (Table 8).

Table 8
Financial privacy trade-off

5.1.3	Would you be willing to accept payment as compensation for greater invasion of your privacy, using	Answer=YES		
5.1.3		Total	Female	Male
5.1.3_1	Surveillance via CCTV cameras	12.4%	6.8%	17.3%
5.1.3_2	Surveillance of online social networks	12.9%	12.5%	13.3%
5.1.3_3	Surveillance utilising databases containing personal information	16.1%	15.9%	16.3%
5.1.3_4	Surveillance of financial transactions	12.4%	9.1%	15.3%
5.1.3_5	Geolocation surveillance	10.8%	6.8%	14.3%

Note: Results in this table marked with an asterisk (*) signify that the results between males and females are statistically significantly different (p<.05). Other differences between males and females are not statistically significant.

Respondents' feelings of security or insecurity due to the presence of surveillance are only very weakly related to their perceived impact of surveillance on privacy (see table A24 in Appendix A). Perceived impact of surveillance on privacy was only very weakly related with feelings of trust in private companies and government agencies being able to protect personal information gathered via surveillance. Similarly, perceived impact of surveillance on privacy

was very weakly related to feelings of control over processing of personal information gathered via surveillance.[12] Therefore, despite the clearly perceived lack of trust and control in the context of personal information gathered during surveillance, and a moderately perceived negative impact of surveillance on one's privacy, these feelings appear not to be necessarily related.

4.6 Relationships between feelings, effectiveness of surveillance measures, and related laws

There are only very weak relationships between the respondents feeling secure due to the presence of surveillance, and feelings of control over their personal data collected through surveillance. Feelings of security due to the presence of surveillance and trust that personal data gathered by government agencies or private companies through surveillance is protected also shows only a weak link. A similar picture is revealed when looking at the relationship between feelings of control over personal information and trust in its protection with the perceived effectiveness of laws and regulations regarding the protection of personal information gathered via surveillance measures (see table A25 Appendix A).

The relationship between the perceived effectiveness of data protection laws and feelings of trust that personal data gathered by government agencies through surveillance is protected is stronger than the relationship with feelings of trust that personal data gathered by private companies is protected. This finding may be due to the fact that data protection laws are perceived as being applied by or being applicable to government agencies more than to private companies. There is a moderate relationship between the perceived effectiveness of laws regarding the protection of personal information gathered via surveillance measures and feelings of security produced by surveillance. It is unclear what the basis of such a relationship may be, but it would appear that an increased belief in the effectiveness of data protection laws may produce an increased feeling of security in the presence of surveillance.

There is also a relationship between perceived effectiveness of surveillance measures and feelings of security in the presence of surveillance (see table A26 Appendix A), but this relationship is clearly weaker than the one with the effectiveness of data protection laws. This suggests that increasing the perceived effectiveness of surveillance measures may increase citizens' feelings of security in the presence of surveillance less than an increased effectiveness of surveillance-related data protection laws.

[12] With the exception of CCTV where a weak to moderate relationship can be found.

5. Awareness of surveillance taking place

5.1 Noticing CCTV

Table 9

Whether CCTV is noticed

Q5.2.1	Total	Female	Male
I never notice CCTV cameras.	2.3%	3.8%	0.8%
I rarely notice CCTV cameras.	10.4%	9.0%	11.8%
I sometimes notice CCTV cameras.	36.5%	42.1%	30.7%
I often notice CCTV cameras.	37.7%	34.6%	40.9%
I always notice CCTV cameras.	11.2%	7.5%	15.0%
I don't know / No answer	2.0%	3.1%	0.8%

Q5.2.1: Which of the following best describes you? […]
Note: Results in this table marked with an asterisk (*) signify that the results between males and females are statistically significantly different (p<.05). Other differences between males and females are not statistically significant.

There is no significant gender difference in whether CCTV is noticed. Overall, almost half of the respondents (48.8%) often or always notice CCTV cameras, whereas only about one out of ten respondents (12.7%) indicated that they never or rarely notice CCTV cameras.

5.2 Beliefs about surveillance taking place

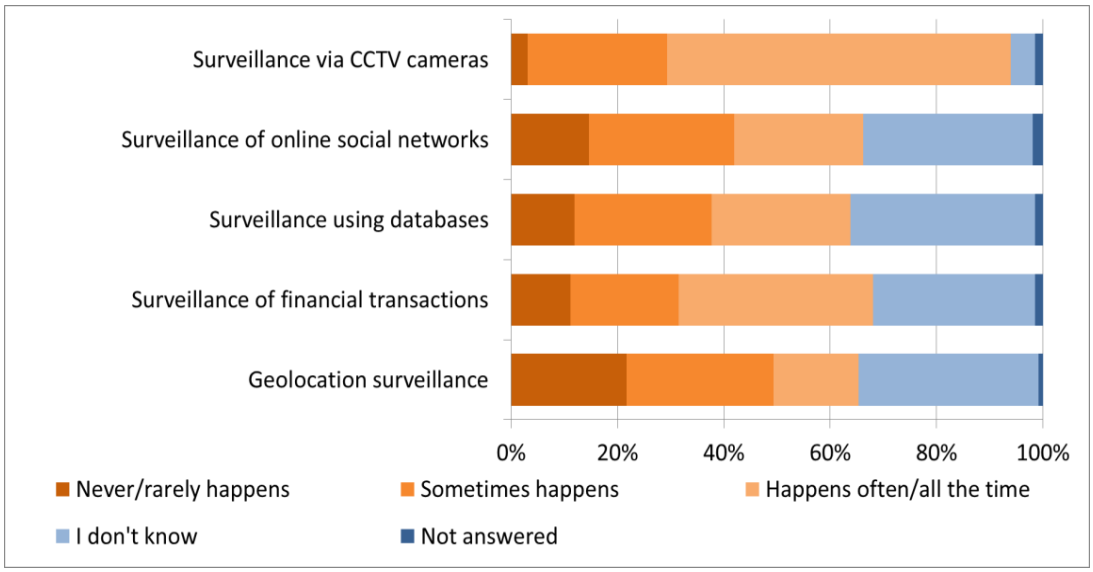

Figure2: Q5.2.2 – In your opinion, how often do the following types of surveillance take place in the country where you live?

Not very surprisingly, a large majority of respondents believes that CCTV surveillance takes place often or all the time in the country where they live (74.7%). Far fewer respondents believe that the other types of surveillance take place, between 16 and 37% for surveillance of online social-networking, surveillance using databases containing personal information, surveillance of financial transactions and geolocation surveillance. Interesting, though, is the considerable proportion of respondents who indicated for these types of surveillance that they, actually, "don't know" whether or how often such surveillance takes place in their country (30-35%). Male respondents believe that surveillance of online social networks is taking place more often than female respondents. The largest difference,

there, can be found in the answer “I don’t know” where the “gap” is up to 16 percentage points between male and female responses (i.e., female respondents more often indicating “I don’t know” than male respondents).

6. Acceptability of data sharing practices

Table 10

Acceptability of data sharing practices of government agencies

	Sharing citizens' information gathered via surveillance measures with other government agencies	Sharing citizens' information gathered via surveillance measures with foreign governments	Sharing citizens' information gathered via surveillance measures with private companies
Fully acceptable in all circumstances	5.0%	3.8%	2.7%
Acceptable only if the citizen is suspected of wrong-doing	21.2%	23.5%	14.2%
Acceptable only if the citizen is suspected of wrong-doing and the surveillance is legally authorised	50.4%	46.5%	27.7%
Acceptable if the citizen is informed	18.1%	13.5%	13.8%
Acceptable if the citizen has given consent	28.1%	24.6%	28.1%
Not acceptable in any circumstances	4.2%	11.2%	30.4%
I don't know	2.3%	2.3%	1.9%

_____

Q7.1: Please indicate the extent to which you believe the following practices of government agencies for fighting crime are acceptable or not: Government agencies share a citizen’s information gathered via surveillance measures with […]

Generally, the sharing of information gathered through surveillance by government agencies with other government agencies or with foreign governments is deemed acceptable by the majority of respondents if the citizen is suspected of wrong-doing. However, most of these respondents believe it is necessary that the surveillance needs to be legally authorised for it to be acceptable. About one out of four participants believe it is acceptable for information gathered through surveillance by government agencies to be shared with other government agencies or, slightly less, with foreign governments if the citizen has given consent. Whilst results regarding the sharing of information with other government agencies or foreign governments are fairly similar, sharing information with private companies is much less acceptable even if surveillance has been lawfully authorised for somebody suspected of wrong-doing. Many respondents (30.4%) think it is unacceptable in all circumstances or only if the citizen has given consent (28.1%) for government agencies to share information gathered through surveillance with private companies.

Table 11

Acceptability of data sharing practices of private companies

	Sharing citizens' information gathered via surveillance measures with government agencies	Sharing citizens' information gathered via surveillance measures with foreign governments	Sharing citizens' information gathered via surveillance measures with other private companies
Fully acceptable in all circumstances	1.9%	1.2%	0.8%
Acceptable only if the citizen is suspected of wrong-doing	19.2%	14.6%	11.9%
Acceptable only if the citizen is suspected of wrong-doing and the surveillance is legally authorised	34.2%	28.8%	20.8%
Acceptable if the citizen is informed	13.8%	10.0%	10.8%
Acceptable if the citizen has given consent	28.8%	24.6%	28.8%
Not acceptable in any circumstances	17.3%	31.5%	34.6%
I don't know	1.5%	2.3%	3.1%

_____

Q7.2: Please indicate the extent to which you believe the following practices of private companies for fighting crime are acceptable or not: Private companies share a citizen's information gathered via surveillance measures with […]

There is an even lower number of respondents who find it fully acceptable (or acceptable if the citizen is suspected of wrong-doing) if private companies share a citizen's personal information. Lawfulness still has a strong effect, but it is generally less strong than with government sharing practices. Generally, there is a considerable number of respondents who feel that, unless information or consent has been given, private data should "stay private" – particularly information sharing practices between private companies are deemed unacceptable in any circumstances (34.6%).

7. Acceptability of surveillance in different locations

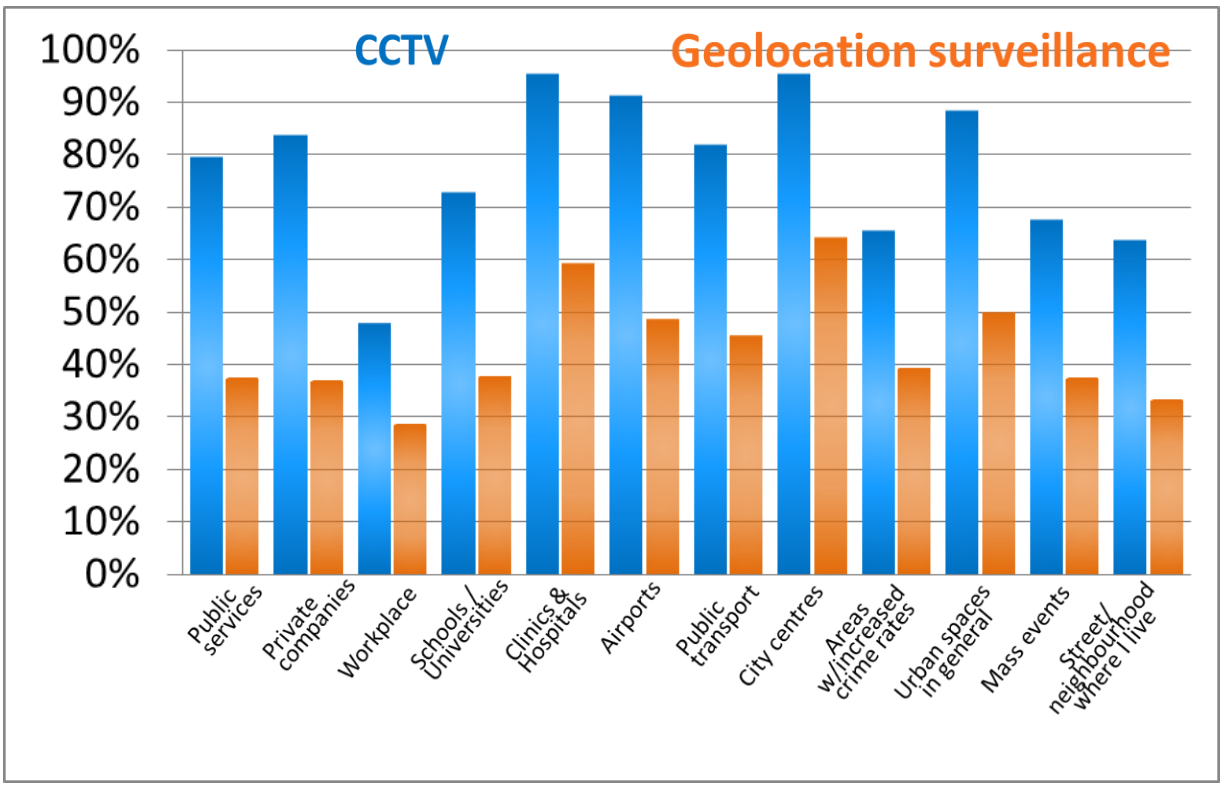

Figure 3: Acceptability of surveillance in different locations
Q6.1 – In which of the following locations or events would you find the different types of surveillance for fighting crime acceptable?

CCTV surveillance is perceived as clearly more acceptable than geolocation surveillance for the purposes of fighting crime in all the events and locations investigated. Acceptance rates for CCTV are typically 60% to100% higher than those for geolocation surveillance, with male respondents finding geolocation surveillance in some locations (private companies, specific areas with increased crime rates, urban spaces in general, and their own street/neighbourhood) more acceptable than female respondents.

Both types of surveillance are least accepted in the workplace (CCTV 48%, geolocation surveillance 29%). The highest acceptance of surveillance by CCTV is in clinics/hospitals and city centres (both 95%), with geolocation surveillance in clinics and hospitals also seen as acceptable by a majority of respondents (59%). A possible explanation for this rather surprising result could be that such acceptance levels of surveillance in clinics and hospitals may be related to high levels of trust in the care provided by these institutions, or to an increased perceived vulnerability in these locations that requires higher levels of protection through surveillance. Acceptance levels for CCTV in airports, urban spaces in general, public transport, public services and private companies are also rather high (82-91%), which in itself is unsurprising – but surveillance in specific areas with increased crime rates is less acceptable. This may be due to respondents having become accustomed to surveillance in city centres and urban areas.

8. Economic costs of surveillance

Few respondents believed that the money allocated to government agencies for carrying out surveillance for the purpose of fighting crime in their country is "just right"; 32.6% indicated that, in their opinion, there was too little or far too little money allocated, a mere 3.1% believed it was too much or far too much. But overall more than half of the respondents felt that they, actually, "don't know" whether sufficient funds were allocated to government agencies for carrying out surveillance for the purpose of fighting crime, with female respondents replying more often than males that they "don't know".

Those respondents who thought that the money allocated to government agencies for carrying out surveillance to fight crime was too little or far too little were asked whether they are prepared to pay higher taxes so that more money can be allocated for this purpose. About a third of these respondents (32.9%) indicated they would be willing to do so whilst half (49.4%) replied that they would not. However, the comparatively low number of respondents to this question (n=85) only allows very cautious interpretations of these results.

Table 12
Beliefs about money allocated to surveillance

	Total	Female	Male
far too little	8.8%	9.8%	7.9%
too little	23.8%	22.6%	25.2%
just right	7.3%	2.3%	12.6%
too much	1.9%	0.8%	3.1%
far too much	1.2%	0.0%	2.4%
I don't know	55.8%	62.4%	48.8%*
No answer	1.2%	2.3%	0.0%

Q6.2: In your opinion is the money allocated to government agencies for carrying out surveillance for the purpose of fighting crime in your country […]?
Note: Results in this table marked with an asterisk (*) signify that the results between males and females are statistically significantly different (p<.05). Other differences between males and females are not statistically significant.

Table 13
Willingness to pay more taxes to increase budget allocated to carry out surveillance to fight crime

	Total	Female	Male
Yes	32.9%	27.9%	38.1%
No	49.4%	53.5%	45.2%
I don't know	15.3%	16.3%	14.3%
No answer	2.4%	2.3%	2.4%

Q6.2.1: Would you be willing to pay more taxes so that more money is allocated for carrying out surveillance to fight crime?
Note: Results in this table related to gender and marked with an asterisk (*) are statistically significant (p<.05); for all other results the respective tests did not show a statistically significant difference between gender.

9. Social costs of surveillance

9.1 Attitudes towards surveillance

There are very few gender differences in the attitudes and perceptions of respondents towards surveillance ("social costs")[13]. On one hand, protection of the individual citizen and, in particular, protection of the community were perceived as the social benefits of surveillance. But, on the other hand, the risks associated with surveillance seemed to be even more keenly felt. The highest perceived risks are that information gathered through surveillance is intentionally misused or misinterpreted, followed by the risk of privacy invasion and that surveillance may violate citizens' right to control whether information about them is used. The risks that surveillance may cause discrimination or stigma and limit citizen rights (to communication, free speech and information) also appear to be strong issues, though not at the level of data misuse and misinterpretation.

Table 14
Attitudes towards surveillance

		Total		Female		Male	
		Mean	STD	Mean	STD	Mean	STD
Q8.1.1	Surveillance provides protection to the individual citizen	5.19	1.718	5.26	1.743	5.13	1.697
Q8.1.2	Surveillance provides protection of the community	5.51	1.591	5.58	1.597	5.44	1.588
Q8.1.3	Surveillance can be a source of personal excitement	3.51	2.303	3.52	2.388	3.50	2.233
Q8.1.4	Surveillance can be something to play with	3.88	2.508	4.04	2.416	3.72	2.596
Q8.1.5	Surveillance may cause discrimination towards specific groups of society	4.69	2.153	4.66	2.129	4.73	2.184
Q8.1.6	Surveillance may be a source of stigma	4.53	2.079	4.61	2.260	4.47	1.909
Q8.1.7	Surveillance may violate a person's privacy	5.81	1.621	5.79	1.603	5.83	1.645
Q8.1.8	Surveillance may violate citizens' right to control whether information about them is used	5.63	1.686	5.52	1.796	5.74	1.568
Q8.1.9	There is a potential that information gathered via surveillance could be intentionally misused	6.04	1.349	5.91	1.542	6.17	1.120
Q8.1.10	There is a potential that information gathered via surveillance could be misinterpreted	5.94	1.333	5.98	1.379	5.90	1.289

[13] Males respondents perceived the risk that surveillance may limit citizens' right of communication more often than female respondents.

Q8.1.11	Surveillance may limit a citizen's right of expression and free speech	4.95	2.057	4.94	2.047	4.97	2.076
Q8.1.12	Surveillance may limit a citizen's right of communication	4.83	2.074	4.55	2.170	5.09*	1.954
Q8.1.13	Surveillance may limit a citizen's right of information	4.46	2.121	4.34	2.148	4.59	2.095

Q8.1: Please indicate the extent to which you agree or disagree with the following statements clicking on the point on the scale that best represents your views. (1=disagree; 7=agree)
Note: Results in this table marked with an asterisk (*) signify that the results between males and females are statistically significantly different (p<.05). Other differences between males and females are not statistically significant

9.2 Behavioural changes resulting from surveillance

Very few respondents have made changes to their behaviour as a result of being aware of surveillance. The two changes in behaviour that were undertaken by a slight majority of respondents was to stop exchanging their personal data for discounts or vouchers, and keeping themselves informed about technical possibilities to protect their personal data, but only a small minority of respondents have taken more proactive moves such as restricting their activities, avoiding surveilled locations or taking defensive measures. There are no statistically significant gender differences except for male respondents indicating more often than females that they have kept themselves informed about technical possibilities to protect their personal data.

Table 15
Behaviour changes resulting from an awareness of surveillance

		Total		Female		Male	
		Mean	STD	Mean	STD	Mean	STD
Q8.2.1	I have restricted my activities or the way I behave	2.85	2.093	2.60	2.052	3.10	2.111
Q8.2.2	I have avoided locations or activities where I suspect surveillance is taking place	2.12	1.732	1.91	1.553	2.33	1.875
Q8.2.3	I have taken defensive measures (hiding face, faking data, incapacitating surveillance device)	1.69	1.460	1.51	1.213	1.86	1.651
Q8.2.4	I have made fun of it	1.76	1.550	1.59	1.405	1.93	1.671
Q8.2.5	I have filed a complaint with the respective authorities	1.73	1.588	1.64	1.523	1.82	1.654
Q8.2.6	I have informed the media	1.55	1.273	1.44	1.224	1.66	1.316
Q8.2.7	I have promoted or participated in collective actions of counter-surveillance	1.69	1.496	1.51	1.273	1.89	1.682
Q8.2.8	have kept myself informed about technical possibilities to protect my personal data	4.05	2.214	3.73	2.175	4.36*	2.216

Q8.2.9	I have stopped accepting discounts or vouchers if they are in exchange for my personal data	4.46	2.402	4.27	2.378	4.64	2.421

Q8.2: To what extent has your awareness of surveillance changed your personal behaviour? Please indicate the extent to which you agree or disagree with the following statements clicking on the point on the scale that best represents your views. (1=disagree; 7=agree)

Note: Results in this table marked with an asterisk (*) signify that the results between males and females are statistically significantly different (p<.05). Other differences between males and females are not statistically significant.

9.3 Perceived social benefits and social costs: Relationships

The two perceived social benefits - protection for the individual citizen and protection for the community, are rather strongly related to each other. Many respondents have the same beliefs about both these benefits. However, these perceived benefits appear to be largely independent of the perceived social costs. Several respondents have the same attitude towards many of the perceived social costs, being likely to respond in the same manner as to

- whether surveillance limits the rights of free speech, communication and information;
- the potential for surveillance to violate privacy and violate the right of citizens to control whether information collected about them through surveillance is used;
- surveillance potentially bearing the risk of discrimination and being a source of stigma; and whether surveillance limits the right of free speech, may be a source of stigma, and may violate the right of citizens to control whether information collected about them through surveillance is used (see table A17 in Appendix A).

Generally, it appears that respondents do perceive both social costs and benefits, but without necessarily "weighing" them against each other. Additionally, there is a, mostly weak, relationship between the perceived social benefits of individual and community protection and the perceived usefulness and effectiveness of most types of surveillance measures investigated in this study (see table A20 in Appendix A).

There are some links between changes in different behaviours as a result of awareness of surveillance. A strong connection can be found between filing a complaint with the respective authorities and promoting or participating in collective actions of counter-surveillance, and between avoiding locations where surveillance measures are suspected to take place and taking defensive measures (see Table A18 in Appendix A). These can be seen to represent certain “strategies” of protection against surveillance, though it needs to be kept in mind that few respondents have acted in this way (see Table 15 above). Those changes of personal behaviour most often indicated by respondents - not accepting discounts/vouchers in exchange for personal data, and keeping oneself informed about the possibilities of technical data protection – are only very weakly related to the other forms of behavioural changes (see Table A18 in Appendix A).

In this study there is little evidence to support a relationship between the perceived negative effects of surveillance and behavioural changes as a result of surveillance (see table A19 in Appendix A). The most visible, but still rather weak, connection, here, can be seen between respondents’ perception that surveillance may limit citizens’ right of communication and the behavioural consequence of restricting one’s activities – a consequence which has been largely described as the “chilling effect” of surveillance. Those social costs which were perceived most often – data misuse, data misinterpretation, violation of privacy and violation of the right to control the use of one’s personal data – show only very weak relationships with not accepting vouchers in exchange for personal data, and no relationship with other behavioural measures that could, perhaps, be expected in such case (e.g., filing complaints with the responsible authorities).

10. Surveillance and the role of age

Generally, interpreting differences between age groups has to be approached with caution due to the small number of respondents in some of the age groups. However, there can be identified some significant differences between age groups and patterns in the distribution of answers which reveal interesting, though not entirely surprising, aspects.

Respondents of all ages show a rather similar level of knowledge of different types of surveillance with the exception of the 65+ years age group, where respondents replied significantly less often that they had heard of the surveillance of online communication, of telecommunication, of financial information, and of Global Positioning Systems being used for the purpose of surveillance. (see table A1 in Appendix A). Regarding the knowledge of specific reasons for surveillance, respondents of the 65+ age group indicated that they know less about reduction and prosecution of crime as well as about the control of border-crossings. Although overall less than half of the respondents expressed views about whether enough funds are allocated to government agencies for surveillance, the majority of them in all age groups indicated that too little or far too little is spent (see table A14 in Appendix A).

Regarding the situational awareness of surveillance, there are a number of significant differences between age groups. For CCTV, respondents aged 25-34 expressed more often than others their belief that this type of surveillance happens all the time in the country where they live[14], and they also replied more often than respondents from other age groups that surveillance of online social networks takes often happens. For some of the other types of surveillance (surveillance using databases containing personal information and surveillance of financial transactions), it is youngest age group (18-24 years) where respondents believed more than those of other age groups that it rarely or never happens. On the other side, the 65+ respondents show the largest proportion of answers indicating that they, actually, "don't know" whether or not some types of surveillance are taking place in the country where they live[15], and they believe less often than others that surveillance happens often or all the time(see table A13 in Appendix A).

Almost all types of surveillance are perceived by all age groups as more useful than not useful for the reduction, detection and prosecution of crime (see table A5 in Appendix A), with one exceptions: Respondents of the 25-34 age group indicate that surveillance using databases containing personal information is less useful than useful for the reduction of crime. The only statistically significant difference in responses between age groups can be found in CCTV for the purpose of reduction of crime, where the 35-44 year olds find this type of surveillance still more useful than not useful, but significantly less useful than the 65+ year olds. CCTV is rated by respondents of all age groups as the most useful form of surveillance for the reduction, detection, and prosecution of crime.

A very similar picture is revealed for the perceived effectiveness of surveillance, where CCTV is seen by respondents of all ages to be the most effective measure amongst the types of surveillance investigated, and no statistically significant differences between age groups (see table A4 in Appendix A).

There are also no significant differences between age groups in their feelings of security, or insecurity, in the presence of surveillance measures. This applies as well to feelings regarding control over the processing of personal information gathered via government agencies or private companies, with the exception of the oldest respondents (65+) feeling more lack of control (over data gathered by private companies) than the youngest respondents (18-24), and to trust (or mistrust) that government agencies or private companies protect personal information (see

[14] However, at the same time they indicated less often than respondents from all other age groups that CCTV often happens.
[15] Surveillance of online social networks and surveillance of financial transactions.

table A7 in Appendix A). However, when being asked how happy or unhappy they feel with the different types of surveillance, it appears that respondents of the 65+ age group feel significantly happier with CCTV surveillance than younger respondents, in particular than the 35-44 year olds (see table A8 in Appendix A). But when asked how they feel about surveillance taking place without being aware of it, the respondents of all age groups feel similarly unhappy.

The majority of respondents in all age groups also have similar views regarding the impact of surveillance on privacy. With the exception of CCTV, respondents of all age groups agree more than disagree that the different types of surveillance have a negative impact on their privacy (see table A10 in Appendix A). Accepting financial compensation in exchange for more invasion of privacy through surveillance would be an option only for about a third of the 18-24 year old respondents, and only for CCTV and surveillance of online social networks (table A11 in Appendix A).

There are no age differences in the perceived social costs, and benefits, of surveillance, except for the25-34 year olds perceiving the risk of privacy invasion stronger than the 65+ year olds[16] (see A16a in Appendix A). However, there are a number of statistically significant differences in the behavioural changes of respondents due to surveillance (see table A16b in Appendix A). Although overall few respondents changed their behaviour as a consequence of becoming aware of surveillance, younger respondents - in particular those aged between 25 and 34 years indicated that they had restricted their activities or the way they behave, promoted or participated in collective actions of counter-surveillance and kept themselves informed about technical possibilities to protect their personal data more often than respondents aged 65+ years.

It is not completely surprising that younger citizens who have grown up with new technologies, finished their education, taken up a profession and are grounding their opinions on some life experience exhibit some more awareness of and knowledge about technology-based surveillance measures and adaptation of behaviour to mitigate the risks perceived than older (65+ years) age groups. At the same time though, there are very few significant differences between age groups when it comes to perceptions of usefulness and effectiveness of these surveillance measures, perceived privacy impact, and related feelings such as security, control, trust and general happiness. This result suggests that, in Malta, other factors rather than age-related levels of knowledge play a role in the citizens' feelings and perceptions towards surveillance.

11. Conclusion

Overall, the Maltese respondents indicated a strongly felt lack of trust in the protection of, and control over, personal information gathered via surveillance.

Based on the data collected in this study, the majority of Maltese respondents feel more unhappy than happy with the different types of surveillance (except CCTV), and they feel also unhappy about surveillance taking place without them knowing about it. Additionally, there is a link between feeling happy, or unhappy, about surveillance and feeling secure or insecure through the presence of surveillance.

A large number of Maltese respondents appear to have two distinct, and very different, reactions to surveillance. Some people feel secure in the presence of surveillance, but in others surveillance produces feelings of insecurity.

[16] Still the 65+ year olds perceive also a strong risk of privacy invasion with a mean result of 5.28 on a scale of 1=disagree and 7=agree.

However, analyses also indicate that increasing the effectiveness of laws regarding the protection of personal data gathered via surveillance, more than increasing the effectiveness of surveillance measures itself, may make citizens feel more secure.

Further research is needed to disentangle the relationships and effects between surveillance measures, feelings of security or insecurity, and citizens' general quality of life feelings.

APPENDICES

Appendix A – Figures and tables

Table A26: Correlations – Feelings of security, trust and control vs. effectiveness of surveillance measures

Table A1: Knowledge of types of surveillance by age group

		Answer = YES						
		Total	**18-24**	**25-34**	**35-44**	**45-54**	**55-64**	**65+**
Q1_1	**Biometric data**, e.g. analysis of fingerprints, palm prints, facial or body features	85.8%	84.4%	91.1%	92.7%	86.4%	82.2%	79.2%
Q1_2	**"Suspicious" behaviour**, e.g. automated detection of raised voices, facial or body features	36.9%	34.4%	37.8%	43.9%	38.6%	37.8%	30.2%
Q1_3	**Data and traffic on the internet**, e.g. Deep Packet/Content inspection	59.2%	59.4%	71.1%	65.9%	59.1%	62.2%	41.5%
Q1_4	**Databases** containing personal information, e.g. searching state pension databases, or customer databases of private companies	82.3%	75.0%	86.7%	92.7%	86.4%	82.2%	71.7%
Q1_5	**Online communication**, e.g. social network analysis, monitoring of chat rooms or forums	85.8%	93.8%	91.1%	95.1%	90.9%	88.9%	62.3%*
Q1_6	**Telecommunication**, e.g. monitoring of phone calls or SMS	92.3%	93.8%	97.8%	100.0%	93.2%	91.1%	81.1%*
Q1_7	**Electronic tagging / Radio Frequency Identification** (RFID), e.g. tracking geolocation with electronic chips implanted under the skin or in bracelets	61.2%	56.3%	60.0%	68.3%	70.5%	66.7%	47.2%
Q1_8	**Global Positioning Systems** (GPS), e.g. tracking geolocation of cars or mobile phones	83.5%	84.4%	88.9%	92.7%	90.9%	86.7%	62.3%*
Q1_9	**CCTV cameras**, e.g. in public places, airports or supermarkets	96.2%	100.0%	97.8%	95.1%	95.5%	97.8%	92.5%
Q1_10	**Financial information**, e.g. tracking of debit/credit card transactions	82.7%	81.3%	88.9%	97.6%	81.8%	86.7%	64.2%*

Q1: Have you heard of the use of any of the below for the purpose of monitoring, observing or tracking of people's behaviour, activities or personal information?

Note: Results in this table marked with an asterisk (*) show a statistically significant difference ($p<.05$) from all other age groups; for all other results the respective tests did not show a statistically significant difference between the individual age groups.

Table A2: Known reasons for surveillance by age group

		Answer = YES						
		Total	**18-24**	**25-34**	**35-44**	**45-54**	**55-64**	**65+**
Q2_1	The reduction of crime	80.0%	75.0%	82.2%	87.8%	86.4%	84.4%	66.0%*
Q2_2	The detection of crime	89.2%	90.6%	91.1%	90.2%	86.4%	91.1%	86.8%
Q2_3	The prosecution of crime	72.7%	71.9%	82.2%	78.0%	68.2%	86.7%	52.8%*
Q2_4	Control of border-crossings	67.7%	62.5%	80.0%	70.7%	75.0%	71.1%	49.1%*
Q2_5	Control of crowds	47.3%	40.6%	44.4%	43.9%	56.8%	57.8%	39.6%
Q2_6	Other	16.9%	3.1%	15.6%	31.7%*	20.5%	15.6%	13.2%
Q2_7	I don't know of any reasons.	2.7%	3.1%	0.0%	0.0%	4.5%	0.0%	7.5%*

Q2: What reasons for the setting up of surveillance do you know of?

Note: Results in this table marked with an asterisk (*) show a statistically significant difference ($p<.05$) from all other age groups); for all other results the respective tests did not show a statistically significant difference between the individual age groups.

Table A3: Correlations – Usefulness for reduction, detection and prosecution of crime

Usefulness for **REDUCTION** of crime

			CCTV	database	SNS	financialT	geolocat.
			Q3.1_1	Q3.1_2	Q3.1_3	Q3.1_4	Q3.1_5
REDUCTION	CCTV	Q3.1_1	1.000	0.326	0.393	0.360	0.385
	database	Q3.1_2	0.326	1.000	0.621	0.553	0.591
	SNS	Q3.1_3	0.393	0.621	1.000	0.532	0.545
	financT	Q3.1_4	0.360	0.553	0.532	1.000	0.510
	Geoloc.	Q3.1_5	0.385	0.591	0.545	0.510	1.000
DETECTION	CCTV	Q3.2_1	0.516	0.203	0.260	0.233	0.181
	database	Q3.2_2	0.328	0.647	0.539	0.413	0.441
	SNS	Q3.2_3	0.341	0.524	0.688	0.393	0.462
	financT	Q3.2_4	0.310	0.457	0.486	0.556	0.332
	Geoloc.	Q3.2_5	0.319	0.430	0.423	0.461	0.594
PROSECUTION	CCTV	Q3.3_1	0.401	0.176	0.117	0.142	0.129
	database	Q3.3_2	0.380	0.631	0.484	0.461	0.358
	SNS	Q3.3_3	0.370	0.482	0.581	0.443	0.363
	financT	Q3.3_4	0.358	0.440	0.458	0.523	0.319
	Geoloc.	Q3.3_5	0.353	0.384	0.327	0.392	0.454

Usefulness for **DETECTION** of crime

			CCTV	database	SNS	financialT	geolocat.
			Q3.2_1	Q3.2_2	Q3.2_3	Q3.2_4	Q3.2_5
DETECTION	CCTV	Q3.2_1	1.000	0.302	0.323	0.420	0.354
	database	Q3.2_2	0.302	1.000	0.607	0.574	0.530
	SNS	Q3.2_3	0.323	0.607	1.000	0.567	0.490
	financT	Q3.2_4	0.420	0.574	0.567	1.000	0.487
	Geoloc.	Q3.2_5	0.354	0.530	0.490	0.487	1.000
PROSECUTION	CCTV	Q3.3_1	0.577	0.147	0.102	0.270	0.193
	database	Q3.3_2	0.386	0.625	0.485	0.533	0.390
	SNS	Q3.3_3	0.380	0.424	0.575	0.460	0.359
	financT	Q3.3_4	0.298	0.442	0.338	0.594	0.305
	Geoloc.	Q3.3_5	0.345	0.316	0.339	0.475	0.479

Usefulness for **PROSECUTION** of crime

			CCTV	database	SNS	financialT	geolocat.
			Q3.3_1	Q3.3_2	Q3.3_3	Q3.3_4	Q3.3_5
PROSECUTION	CCTV	Q3.3_1	1.000	0.282	0.342	0.375	0.474
	database	Q3.3_2	0.282	1.000	0.667	0.650	0.455
	SNS	Q3.3_3	0.342	0.667	1.000	0.584	0.504
	financT	Q3.3_4	0.375	0.650	0.584	1.000	0.544
	Geoloc.	Q3.3_5	0.474	0.455	0.504	0.544	1.000

Table A4: Perceived effectiveness of surveillance by age group

Q5.1.1	Effectiveness (1=disagree; 7=agree)	Total		18-24		25-34		35-44	
		Mean	STD	Mean	STD	Mean	STD	Mean	STD
Q5.1.1_1	CCTV is an effective way to protect against crime	5.64	1.499	5.58	1.259	5.42	1.500	5.46	1.645
Q5.1.1_2	Surveillance utilising databases containing personal information is an effective way to protect against crime	3.74	1.806	3.97	1.779	3.70	1.407	3.26	1.841
Q5.1.1_3	Surveillance of online social-networking is an effective way to protect against crime	4.01	1.890	4.19	1.749	4.13	1.673	3.74	2.009
Q5.1.1_4	Surveillance of financial transactions is an effective way to protect against crime	4.62	1.806	4.28	1.818	4.62	1.542	4.55	1.961
Q5.1.1_5	Geolocation surveillance is an effective way to protect against crime.	4.74	1.788	4.34	1.860	4.64	1.694	4.53	1.867

Q5.1.1	Effectiveness (1=disagree; 7=agree)	45-54		55-64		65+	
		Mean	STD	Mean	STD	Mean	STD
Q5.1.1_1	CCTV is an effective way to protect against crime	6	1.479	5.60	1.529	5.73	1.511
Q5.1.1_2	Surveillance utilising databases containing personal information is an effective way to protect against crime	4.07	1.702	3.84	2.115	3.64	1.918
Q5.1.1_3	Surveillance of online social-networking is an effective way to protect against crime	4.14	1.972	3.62	1.873	4.27	2.050
Q5.1.1_4	Surveillance of financial transactions is an effective way to protect against crime	4.83	1.793	4.75	1.882	4.59	1.896
Q5.1.1_5	Geolocation surveillance is an effective way to protect against crime.	4.88	1.770	4.88	1.867	5.07	1.704

Q5.1.1: Please indicate the extent to which you agree or disagree with the following statements clicking on the point on the scale that best represents your views (1=disagree; 7=agree).

Note: Results marked with a letter in superscript, e.g. (^{A}), indicate that the result is statistically significantly different from the result in the same row (question) marked with the same letter. Other results not marked with a superscript are not statistically significantly different between age groups for that question.

Table A5: Perceived usefulness of surveillance by age group

		Total		18-24		25-34		35-44	
Q3.1	**the reduction of crime**	**Mean**	**STD**	**Mean**	**STD**	**Mean**	**STD**	**Mean**	**STD**
Q3.1_1	CCTV cameras	4.31	0.997	4.16	0.987	4.16	1.021	3.95[A]	1.239
Q3.1_2	Surveillance using databases containing personal information	3.24	1.364	3.13	1.332	2.93	1.332	3.05	1.450
Q3.1_3	Surveillance of online social networking	3.40	1.285	3.13	1.238	3.43	1.108	3.13	1.418
Q3.1_4	Surveillance of financial transactions	3.82	1.157	3.37	1.314	3.73	1.086	3.65	1.210
Q3.1_5	Geolocation surveillance	3.83	1.213	3.70	1.418	3.57	1.246	3.48	1.358
Q3.2	**the detection of crime**								
Q3.2_1	CCTV cameras	4.45	0.917	4.50	0.803	4.42	0.892	4.22	1.129
Q3.2_2	Surveillance using databases containing personal information	3.41	1.267	3.13	1.525	3.20	1.188	3.29	1.334
Q3.2_3	Surveillance of online social networking	3.64	1.237	3.71	1.371	3.69	1.019	3.32	1.435
Q3.2_4	Surveillance of financial transactions	4.01	1.083	3.77	1.175	4.11	0.804	3.90	1.142
Q3.2_5	Geolocation surveillance	3.98	1.164	3.50[A]	1.503	3.95	1.099	3.73	1.184
Q3.3	**the prosecution of crime**								
Q3.3_1	CCTV cameras	4.49	0.893	4.37	1.008	4.47	0.960	4.30	0.911
Q3.3_2	Surveillance using databases containing personal information	3.65	1.286	3.45	1.362	3.28	1.278	3.50	1.183
Q3.3_3	Surveillance of online social networking	3.69	1.227	3.42	1.409	3.67	1.040	3.41	1.279
Q3.3_4	Surveillance of financial transactions	4.13	1.127	3.72	1.250	4.26	1.014	4.10	1.071
Q3.3_5	Geolocation surveillance	4.23	1.018	3.97	1.085	4.29	0.995	4.00	1.179

		45-54		55-64		65+	
Q3.1	**the reduction of crime**	**Mean**	**STD**	**Mean**	**STD**	**Mean**	**STD**
Q3.1_1	CCTV cameras	4.5	0.821	4.42	0.941	4.57[A]	0.866
Q3.1_2	Surveillance using databases containing personal information	3.18	1.315	3.62	1.447	3.49	1.233
Q3.1_3	Surveillance of online social networking	3.34	1.257	3.59	1.419	3.76	1.188
Q3.1_4	Surveillance of financial transactions	3.90	1.122	4.18	1.107	3.98	1.047
Q3.1_5	Geolocation surveillance	3.86	1.082	4.17	1.080	4.14	1.014
Q3.2	**the detection of crime**						
Q3.2_1	CCTV cameras	4.60	0.695	4.50	0.952	4.45	0.959
Q3.2_2	Surveillance using databases containing personal information	3.38	1.089	3.60	1.449	3.82	0.914
Q3.2_3	Surveillance of online social networking	3.59	1.117	3.66	1.407	3.87	1.080
Q3.2_4	Surveillance of financial transactions	4.07	1.135	3.98	1.239	4.18	1.010
Q3.2_5	Geolocation surveillance	3.93	1.127	4.24	1.144	4.40[A]	0.744

Q3.3	**the prosecution of crime**						
Q3.3_1	CCTV cameras	4.61	0.689	4.57	0.900	4.55	0.904
Q3.3_2	Surveillance using databases containing personal information	3.82	1.270	3.90	1.375	3.90	1.179
Q3.3_3	Surveillance of online social networking	3.53	1.240	4.05	1.255	4.00	1.076
Q3.3_4	Surveillance of financial transactions	4.38	0.909	4.13	1.305	4.11	1.181
Q3.3_5	Geolocation surveillance	4.30	0.914	4.43	0.984	4.28	0.960

Q3: How useful in general do you think the following types of surveillance are for the reduction / detection / prosecution of crime? (1=not at all useful; 5=very useful)

Note: Results marked with a letter in superscript, e.g. (^{A}), indicate that the result is statistically significantly different from the result in the same row (question) marked with the same letter. Other results not marked with a superscript are not statistically significantly different between age groups for that question.

Table A6: Knowledge and perception of laws by age group

		Total		**18-24**		**25-34**		**35-44**	
		Mean	**STD**	**Mean**	**STD**	**Mean**	**STD**	**Mean**	**STD**
4.1	**Knowledge about laws and regulations regarding the protection of personal data (1=I don't know anything; 5=I am very well informed)**	2.47	1.136	2.59	1.073	2.62	1.173	2.73^{A}	1.205
4.2	**Effectiveness of these laws (1= not effective at all; 5= very effective)**	2.77	1.018	3.00	1.076	2.61	0.844	2.54	1.062

		45-54		**55-64**		**65+**	
		Mean	**STD**	**Mean**	**STD**	**Mean**	**STD**
4.1	**Knowledge about laws and regulations regarding the protection of personal data (1=I don't know anything; 5=I am very well informed)**	2.34	1.055	2.64	1.246	1.98^{A}	0.911
4.2	**Effectiveness of these laws (1= not effective at all; 5= very effective)**	2.68	0.702	3.03	1.295	2.79	1.067

Q4.1: How much do you know about the laws and regulations of your country regarding the protection of your personal information gathered via surveillance measures? (1=I don't know anything about such laws and regulations, 5=I am very well informed)

Q4.2: How effective do you find these laws and regulations? (1=not effective at all, 5=very effective)

Note: Results marked with a letter in superscript, e.g. (^{A}), indicate that the result is statistically significantly different from the result in the same row (question) marked with the same letter. Other results not marked with a superscript are not statistically significantly different between age groups for that question.

Table A7: Feelings of security, control and trust by age group

		Total		18-24		25-34		35-44	
4.3	**Security (1=very insecure; 5=very secure)**	**Mean**	**STD**	**Mean**	**STD**	**Mean**	**STD**	**Mean**	**STD**
	How secure does the presence of surveillance measures make you feel	3.08	1.092	2.91	1.174	2.89	0.920	2.79	1.056
4.4	**Control (1= no control; 7=full control)**								
4.4.1	Control over processing of personal information gathered via government agencies	1.76	0.989	1.97	0.983	1.81	0.880	1.68	0.818
4.4.2	Control over processing of personal information gathered via private companies	1.87	0.993	2.16[A]	1.110	2.00	0.951	1.77	0.810
4.5	**Trust (1=no trust; 7=complete trust)**								
4.5.1	Trust into government that they protect personal information	2.18	1.062	2.47	1.164	2.27	1.009	2.10	1.044
4.5.2	Trust into private companies that they protect personal information	1.87	0.891	1.66	0.827	1.98	0.892	1.70	0.791

		45-54		55-64		65+	
4.3	**Security (1=very insecure; 5=very secure)**	**Mean**	**STD**	**Mean**	**STD**	**Mean**	**STD**
	How secure does the presence of surveillance measures make you feel	3.30	1.137	3.43	0.974	3.09	1.203
4.4	**Control (1= no control; 7=full control)**						
4.4.1	Control over processing of personal information gathered via government agencies	1.55	0.846	1.91	1.291	1.68	0.997
4.4.2	Control over processing of personal information gathered via private companies	2.00	1.049	1.91	1.151	1.38[A]	0.681
4.5	**Trust (1=no trust; 7=complete trust)**						
4.5.1	Trust into government that they protect personal information	1.95	0.987	2.33	1.223	2.02	0.927
4.5.2	Trust into private companies that they protect personal information	1.98	1.024	1.86	0.905	1.95	0.872

Q4.3: How secure does the presence of surveillance measures make you feel? (1=very insecure, 5=very secure)
Q4.4.1/Q4.4.2: How much control do you think you have over the processing of your personal information gathered via government agencies/private companies? (1=no control, 5=full control)
Q4.5.1/Q4.52: How much do you trust government agencies/private companies that they protect your personal information gathered via surveillance measures? (1=no trust, 5=complete trust)
Note: Results marked with a letter in superscript, e.g. ([A]), indicate that the result is statistically significantly different from the result in the same row (question) marked with the same letter. Other results not marked with a superscript are not statistically significantly different between age groups for that question.

Table A8: Happiness with surveillance by age group

		Total		18-24		25-34		35-44	
5.3	**Happy/unhappy with surveillance (1=very happy, 5=very unhappy)**	**Mean**	**STD**	**Mean**	**STD**	**Mean**	**STD**	**Mean**	**STD**
5.3_1	Feel happy/unhappy about CCTV cameras	2.46	1.035	2.56	1.268	2.81	0.958	2.85[A]	1.195
5.3_2	Feel happy/unhappy about surveillance of online social networks	3.33	1.121	3.55	1.121	3.49	1.075	3.56	1.324
5.3_3	Feel happy/unhappy about surveillance using databases	3.61	1.086	3.77	1.055	3.67	1.017	3.93	0.985
5.3_4	Feel happy/unhappy about surveillance of financial transactions	3.17	1.098	3.13	1.362	3.40	0.989	3.25	0.927
5.3_5	Feel happy/unhappy about geolocation surveillance	3.18	1.026	3.44	1.045	3.24	0.916	3.29	1.031
5.4	**Feel happy/unhappy about surveillance taking place without noticing**	3.74	1.073	3.97	0.890	3.91	0.984	3.88	1.187

		45-54		55-64		65+	
5.3	**Happy/unhappy with surveillance (1=very happy, 5=very unhappy)**	**Mean**	**STD**	**Mean**	**STD**	**Mean**	**STD**
5.3_1	Feel happy/unhappy about CCTV cameras	2.41	0.871	2.25	0.866	2.02[A]	0.869
5.3_2	Feel happy/unhappy about surveillance of online social networks	3.17	0.998	3.17	1.116	3.11	1.039
5.3_3	Feel happy/unhappy about surveillance using databases	3.46	1.002	3.45	1.253	3.44	1.140
5.3_4	Feel happy/unhappy about surveillance of financial transactions	2.95	0.975	3.12	1.229	3.14	1.125
5.3_5	Feel happy/unhappy about geolocation surveillance	3.21	0.925	3.03	1.143	2.91	1.065
5.4	**Feel happy/unhappy about surveillance taking place without noticing**	3.73	1.073	3.60	1.053	3.48	1.148

Q5.3: How happy or unhappy do you feel about the following types of surveillance? […}
Q5.4: Surveillance may take place without people knowing about it. How do you feel about this?
Note: Results marked with a letter in superscript, e.g. ([A]), indicate that the result is statistically significantly different from the result in the same row (question) marked with the same letter. Other results not marked with a superscript are not statistically significantly different between age groups for that question.

Table A9: Correlations – Usefulness and happiness / feeling of security

	Feeling of SECURITY

			HAPPINESS with surveillance					
			CCTV	**Database**	**SNS**	**FinancT**	**Geoloc.**	
			Q5.3_1	Q5.3_3	Q5.3_2	Q5.3_4	Q5.3_5	Q4.3
Usefulness for **REDUCTION** of crime	**CCTV**	Q3.1_1	-0.346	-0.182	-0.199	-0.174	-0.232	0.247
	database	Q3.1_2	-0.195	-0.250	-0.375	-0.220	-0.366	0.255
	SNS	Q3.1_3	-0.259	-0.207	-0.227	-0.172	-0.319	0.198
	financialT	Q3.1_4	-0.174	-0.115	-0.193	-0.321	-0.295	0.243
	geolocat.	Q3.1_5	-0.268	-0.160	-0.198	-0.131	-0.346	0.286
Usefulness for **DETECTION** of crime	**CCTV**	Q3.2_1	-0.369	-0.176	-0.141	-0.195	-0.215	0.307
	database	Q3.2_2	-0.272	-0.279	-0.371	-0.264	-0.407	0.315
	SNS	Q3.2_3	-0.263	-0.313	-0.266	-0.225	-0.356	0.265
	financialT	Q3.2_4	-0.319	-0.119	-0.246	-0.322	-0.319	0.268
	geolocat.	Q3.2_5	-0.280	-0.183	-0.210	-0.195	-0.386	0.302
Usefulness for **PROSECUTION** of crime	**CCTV**	Q3.3_1	-0.233	-0.098	-0.138	-0.080	-0.109	0.213
	database	Q3.3_2	-0.206	-0.190	-0.281	-0.248	-0.252	0.352
	SNS	Q3.3_3	-0.214	-0.213	-0.179	-0.141	-0.202	0.211
	financialT	Q3.3_4	-0.148	-0.069	-0.214	-0.281	-0.186	0.231
	geolocat.	Q3.3_5	-0.179	-0.054	-0.147	-0.154	-0.244	0.112

Table A10: Perceptions of privacy by age group

		Total		18-24		25-34		35-44	
5.1.2	**Privacy (1=disagree; 7=agree)**	**Mean**	**STD**	**Mean**	**STD**	**Mean**	**STD**	**Mean**	**STD**
5.1.2_1	CCTV has a negative impact on one's privacy	3.63	2.182	3.87	2.166	3.8	2.018	3.9	2.296
5.1.2_2	Surveillance via databases has a negative impact on one's privacy	4.82	2.059	5.06	2.047	5.16	1.718	4.95	1.931
5.1.2_3	Surveillance of online social networks has a negative impact on one's privacy	4.55	2.17	5.22	1.963	4.56	2.221	4.62	2.267
5.1.2_4	Surveillance of financial transactions has a negative impact on one's privacy	4.46	2.098	4.74	2.221	4.47	1.89	4.63	1.944
5.1.2_5	Geolocation surveillance has a negative impact on one's privacy	4.56	2.102	5.28	1.988	4.69	1.881	4.45	2.049

		45-54		55-64		65+	
5.1.2	**Privacy (1=disagree; 7=agree)**	**Mean**	**STD**	**Mean**	**STD**	**Mean**	**STD**
5.1.2_1	CCTV has a negative impact on one's privacy	3.25	2.125	3.76	2.385	3.30	2.121
5.1.2_2	Surveillance via databases has a negative impact on one's privacy	5.00	2.220	4.68	2.300	4.19	2.039
5.1.2_3	Surveillance of online social networks has a negative impact on one's privacy	4.43	2.097	4.63	2.420	4.05	1.951
5.1.2_4	Surveillance of financial transactions has a negative impact on one's privacy	4.40	2.242	4.49	2.390	4.11	1.957
5.1.2_5	Geolocation surveillance has a negative impact on one's privacy	4.40	2.242	4.28	2.343	4.42	2.050

Q5.1.2: Please indicate the extent to which you agree or disagree with the following statements clicking on the point on the scale that best represents your views (1=disagree; 7=agree).

Note: Results marked with a letter in superscript, e.g. (^{A}), indicate that the result is statistically significantly different from the result in the same row (question) marked with the same letter. Other results not marked with a superscript are not statistically significantly different between age groups for that question.

Table A11: Financial privacy trade-off by age group

		ANSWER = YES						
5.1.3		**Total**	**18-24**	**25-34**	**35-44**	**45-54**	**55-64**	**65+**
5.1.3_1	Surveillance via CCTV cameras	12.4%	27.6%*	10.8%	3.6%	10.0%	12.5%	10.0%
5.1.3_2	Surveillance of online social networks	12.9%	31.0%*	18.9%	3.6%	13.3%	6.3%	3.3%
5.1.3_3	Surveillance utilising databases containing personal information	16.1%	17.2%	29.7%	7.1%	23.3%	12.5%	3.3%
5.1.3_4	Surveillance of financial transactions	12.4%	10.3%	18.9%	14.3%	16.7%	12.5%	0.0%
5.1.3_5	Geolocation surveillance	10.8%	17.2%	13.5%	7.1%	13.3%	9.4%	3.3%

Q5.1.3: Would you be willing to accept payment as compensation for greater invasion or your privacy, using: […]
Note: Results in this table marked with an asterisk (*) show a statistically significant difference (p<.05) from all other age groups; for all other results the respective tests did not show a statistically significant difference between the individual age groups.

Table A12: Awareness of CCTV by age group

Q5.2.1	**Which of the following best describes you?**	**Total**	**18-24**	**25-34**	**35-44**	**45-54**	**55-64**	**65+**
	I never notice CCTV cameras.	2.3%	6.3%	0.0%	2.4%	2.3%	2.2%	1.9%
	I rarely notice CCTV cameras.	10.4%	3.1%	8.9%	7.3%	13.6%	15.6%	11.3%
	I sometimes notice CCTV cameras.	36.5%	43.8%	35.6%	29.3%	38.6%	26.7%	45.3%
	I often notice CCTV cameras.	37.7%	31.3%	42.2%	43.9%	38.6%	44.4%	26.4%
	I always notice CCTV cameras.	11.2%	15.6%	11.1%	17.1%	6.8%	11.1%	7.5%
	I don't know / No answer	2.0%	0.0%	2.2%	0.0%	0.0%	0.0%	7.6%

Q5.2.1: Which of the following best describes you?
Note: Results in this table marked with an asterisk (*) show a statistically significant difference (p<.05) from all other age groups; for all other results the respective tests did not show a statistically significant difference between the individual age groups.

Table A13: Beliefs about surveillance taking place by age group

Q5.2.2	In your opinion, how often do the following types of surveillance take place in the country where you live?	Total	18-24	25-34	35-44	45-54	55-64	65+
Q5.2.2_1	**Surveillance via CCTV cameras**							
	Never happens	0.4%	0.0%	2.2%	0.0%	0.0%	0.0%	0.0%
	Rarely happens	2.7%	3.1%	0.0%	2.4%	2.3%	4.4%	3.8%
	Sometimes happens	26.2%	28.1%	33.3%	17.1%	27.3%	20.0%	30.2%
	Often happens	46.2%	50.0%	22.2%*	61.0%	43.2%	60.0%	43.4%
	Happens all the time	18.5%	12.5%	37.8%*	19.5%	22.7%	13.3%	5.7%*
	I don't know	4.6%	6.3%	4.4%	0.0%	4.5%	2.2%	9.4%
	Not answered	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	7.5%*
Q5.2.2_2	**Surveillance of online social networks**							
	Never happens	1.9%	3.1%	2.2%	2.4%	2.3%	0.0%	1.9%
	Rarely happens	12.7%	21.9%	20.0%	4.9%	4.5%	15.6%	11.3%
	Sometimes happens	27.3%	31.3%	20.0%	39.0%	22.7%	33.3%	20.8%
	Often happens	18.1%	18.8%	33.3%*	26.8%	22.7%	4.4%*	5.7%*
	Happens all the time	6.2%	6.3%	4.4%	2.4%	4.5%	15.6%*	3.8%
	I don't know	31.9%	18.8%	20.0%	24.4%	43.2%	31.1%	47.2%*
	Not answered	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	9.4%*
Q5.2.2_3	**Surveillance utilising databases containing personal information**							
	Never happens	1.5%	3.1%	2.2%	2.4%	0.0%	2.2%	0.0%
	Rarely happens	10.4%	28.1%*	2.2%	4.9%	6.8%	11.1%	13.2%
	Sometimes happens	25.8%	25.0%	33.3%	36.6%	22.7%	17.8%	20.8%
	Often happens	18.8%	15.6%	24.4%	29.3%	15.9%	22.2%	7.5%
	Happens all the time	7.3%	6.3%	6.7%	7.3%	6.8%	11.1%	5.7%
	I don't know	34.6%	21.9%	31.1%	19.5%	47.7%	35.6%	45.3%
	Not answered	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	7.5%*
Q5.2.2_4	**Surveillance of financial transactions**							
	Never happens	1.5%	9.4%*	2.2%	0.0%	0.0%	0.0%	0.0%
	Rarely happens	9.6%	12.5%	8.9%	4.9%	6.8%	6.7%	17.0%
	Sometimes happens	20.4%	28.1%	15.6%	22.0%	25.0%	20.0%	15.1%
	Often happens	24.6%	15.6%	40.0%	39.0%	22.7%	26.7%	5.7%*
	Happens all the time	11.9%	12.5%	15.6%	12.2%	11.4%	15.6%	5.7%
	I don't know	30.4%	21.9%	17.8%	22.0%	34.1%	31.1%	49.1%*
	Not answered	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	7.5%*
Q5.2.2_5	**Geolocation surveillance**							
	Never happens	5.0%	12.5%	6.7%	4.9%	2.3%	4.4%	1.9%
	Rarely happens	16.5%	25.0%	20.0%	17.1%	9.1%	11.1%	18.9%
	Sometimes happens	27.3%	25.0%	37.8%	31.7%	29.5%	24.4%	17.0%
	Often happens	10.8%	6.3%	8.9%	19.5%	13.6%	13.3%	3.8%
	Happens all the time	5.0%	6.3%	0.0%	4.9%	2.3%	13.3%*	3.8%
	I don't know	33.5%	25.0%	26.7%	22.0%	43.2%	33.3%	45.3%
	Not answered	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	9.4%*

Q5.2.2: In your opinion, how often do the following types of surveillance take place in the country where you live?

Note: Results in this table marked with an asterisk (*) show a statistically significant difference (p<.05) from all other age groups; for all other results the respective tests did not show a statistically significant difference between the individual age groups.

Table A14: Beliefs about economic costs of surveillance by age group

Q6.2	Total	18-24	25-34	35-44	45-54	55-64	65+
far too little	8.8%	15.6%	6.7%	7.3%	11.4%	8.9%	5.7%
too little	23.8%	28.1%	28.9%	22.0%	13.6%	24.4%	26.4%
just right	7.3%	6.3%	4.4%	4.9%	15.9%*	6.7%	5.7%
too much	1.9%	6.3%	0.0%	2.4%	2.3%	2.2%	0.0%
far too much	1.2%	0.0%	2.2%	4.9%*	0.0%	0.0%	0.0%
I don't know	55.8%	43.8%	57.8%	58.5%	56.8%	57.8%	56.6%
No answer	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	5.7%*

_____

Q6.2: In your opinion is the money allocated to government agencies for carrying out surveillance for the purpose of fighting crime in your country: […]

Note: Results in this table marked with an asterisk (*) show a statistically significant difference (p<.05) from all other age groups; for all other results the respective tests did not show a statistically significant difference between the individual age groups.

Table A15: Willingness to increase economic costs of surveillance by age group

Q6.2.1	Total	18-24	25-34	35-44	45-54	55-64	65+
Yes	32.9%	28.6%	31.3%	16.7%	45.5%	33.3%	41.2%
No	49.4%	50.0%	62.5%	66.7%	18.2%	60.0%	35.3%
I don't know	15.3%	21.4%	0.0%	16.7%	36.4%	6.7%	17.6%
No answer	2.4%	0.0%	6.3%	0.0%	0.0%	0.0%	5.9%

_____

Q6.2.1: Would you be willing to pay more taxes so that more money is allocated for carrying out surveillance to fight crime?

Note: Results in this table marked with an asterisk (*) show a statistically significant difference (p<.05) from all other age groups; for all other results the respective tests did not show a statistically significant difference between the individual age groups.

Table A16a: Social costs by age group – Attitudes and perceptions

		Total		18-24		25-34		35-44	
Q8.1	**Attitudes and perceptions (1=disagree; 7=agree)**	**Mean**	**STD**	**Mean**	**STD**	**Mean**	**STD**	**Mean**	**STD**
Q8.1.1	Surveillance provides protection to the individual citizen	5.19	1.718	5.52	1.503	5.37	1.381	4.83	2.011
Q8.1.2	Surveillance provides protection of the community	5.51	1.591	5.75	1.368	5.72	1.120	5.17	1.974
Q8.1.3	Surveillance can be a source of personal excitement	3.51	2.303	3.68	2.229	3.97	2.248	3.36	2.396
Q8.1.4	Surveillance can be something to play with	3.88	2.508	3.00	2.259	4.19	2.521	3.61	2.646
Q8.1.5	Surveillance may cause discrimination	4.69	2.153	4.70	2.054	5.07	1.786	4.66	2.243
Q8.1.6	Surveillance may be a source of stigma	4.53	2.079	4.81	1.981	4.95	1.584	4.29	2.347
Q8.1.7	Surveillance may violate a person's privacy	5.81	1.621	6.03	1.494	6.43[A]	0.789	5.55	1.921
Q8.1.8	Violation of citizens' right to control of information use	5.63	1.686	5.27	1.929	5.91	1.378	5.87	1.735
Q8.1.9	Potential that information could be intentionally misused	6.04	1.349	6.25	1.320	6.12	1.199	6.15	1.389
Q8.1.10	Potential that information could be misinterpreted	5.94	1.333	6.03	1.159	5.86	1.391	5.93	1.456
Q8.1.11	Limiting a citizen’s right of expression and free speech	4.95	2.057	4.87	2.060	5.61	1.450	4.66	2.456
Q8.1.12	Surveillance may limit a citizen's right of communication	4.83	2.074	4.84	1.919	5.15	1.918	4.89	2.252
Q8.1.13	Surveillance may limit a citizen's right of information	4.46	2.121	4.71	1.936	4.66	1.755	4.65	2.308

		45-54		55-64		65+	
Q8.1	**Attitudes and perceptions (1=disagree; 7=agree)**	**Mean**	**STD**	**Mean**	**STD**	**Mean**	**STD**
Q8.1.1	Surveillance provides protection to the individual citizen	4.77	1.784	5.14	1.920	5.54	1.541
Q8.1.2	Surveillance provides protection of the community	5.19	1.680	5.50	1.677	5.77	1.535
Q8.1.3	Surveillance can be a source of personal excitement	3.65	2.485	3.24	2.362	3.17	2.145
Q8.1.4	Surveillance can be something to play with	4.15	2.721	3.73	2.409	4.34	2.401
Q8.1.5	Surveillance may cause discrimination	4.49	2.293	4.61	2.312	4.63	2.237

Q8.1.6	Surveillance may be a source of stigma	4.42	2.201	4.44	2.270	4.37	2.036
Q8.1.7	Surveillance may violate a person's privacy	5.98	1.285	5.28[A]	2.016	5.63	1.716
Q8.1.8	Violation of citizens' right to control of information use	5.86	1.241	5.53	1.869	5.28	1.882
Q8.1.9	Potential that information could be intentionally misused	6.02	1.244	5.95	1.430	5.83	1.510
Q8.1.10	Potential that information could be misinterpreted	6.13	1.017	5.93	1.351	5.84	1.519
Q8.1.11	Limiting a citizen's right of expression and free speech	5.02	2.127	5.05	2.047	4.49	2.042
Q8.1.12	Surveillance may limit a citizen's right of communication	4.74	2.256	4.87	2.170	4.49	1.951
Q8.1.13	Surveillance may limit a citizen's right of information	4.26	2.267	4.48	2.391	4.11	2.071

Q8.1: Please indicate the extent to which you agree or disagree with the following statements clicking on the point on the scale that best represents your views (1=disagree; 7=agree).
Note: Results marked with a letter in superscript, e.g. ([A]), indicate that the result is statistically significantly different from the result in the same row (question) marked with the same letter. Other results not marked with a superscript are not statistically significantly different between age groups for that question.

Table A16b: Social costs by age group – Behavioural changes

		Total		18-24		25-34		35-44	
Q8.2	**Changes of personal behaviour (1=disagree; 7=agree)**	**Mean**	**STD**	**Mean**	**STD**	**Mean**	**STD**	**Mean**	**STD**
Q8.2.1	I have restricted my activities or the way I behave	2.85	2.093	3.23	1.910	3.51[A]	2.324	3.26	2.333
Q8.2.2	I have avoided locations or activities where I suspect surveillance is taking place	2.12	1.732	2.13	1.497	1.95	1.577	2.83	2.279
Q8.2.3	I have taken defensive measures (hiding face, faking data etc.)	1.69	1.460	1.94	1.504	1.84	1.731	2.05	1.921
Q8.2.4	I have made fun of it	1.76	1.550	2.33	1.918	2.29	2.028	1.48	1.176
Q8.2.5	I have filed a complaint with the respective authorities	1.73	1.588	1.97	1.790	2.07	1.943	1.97	1.922
Q8.2.6	I have informed the media	1.55	1.273	1.48	1.092	1.61	1.430	1.51	1.314
Q8.2.7	I have promoted or participated in collective actions of counter-surveillance	1.69	1.496	1.97	1.643	2.26[A]	1.888	1.78	1.618
Q8.2.8	have kept myself informed about technical possibilities to protect my personal data	4.05	2.214	4.26[A]	1.966	4.40[B]	2.142	4.74[C]	1.970

Q8.2.9	I have stopped accepting discounts or vouchers if they are in exchange for my personal data	4.46	2.402	4.17	2.408	4.45	2.241	5.15	2.082

		45-54		55-64		65+	
Q8.2	**Changes of personal behaviour (1=disagree; 7=agree)**	**Mean**	**STD**	**Mean**	**STD**	**Mean**	**STD**
Q8.2.1	I have restricted my activities or the way I behave	2.75	2.204	2.34	1.791	2.20[A]	1.695
Q8.2.2	I have avoided locations or activities where I suspect surveillance is taking place	1.93	1.571	1.81	1.277	2.09	1.872
Q8.2.3	I have taken defensive measures (hiding face, faking data etc.)	1.33	0.902	1.56	1.201	1.51	1.261
Q8.2.4	I have made fun of it	1.77	1.547	1.49	1.298	1.39	1.017
Q8.2.5	I have filed a complaint with the respective authorities	1.38	1.161	1.71	1.436	1.34	1.039
Q8.2.6	I have informed the media	1.55	1.329	1.60	1.326	1.53	1.154
Q8.2.7	I have promoted or participated in collective actions of counter-surveillance	1.44	1.266	1.54	1.426	1.25[A]	0.839
Q8.2.8	have kept myself informed about technical possibilities to protect my personal data	4.05	1.947	4.23[D]	2.448	2.69[ABCD]	2.214
Q8.2.9	I have stopped accepting discounts or vouchers if they are in exchange for my personal data	4.67	2.242	4.18	2.653	4.10	2.668

Q8.2: Please indicate the extent to which you agree or disagree with the following statements clicking on the point on the scale that best represents your views (1=disagree; 7=agree).

Note: Results marked with a letter in superscript, e.g. ([A]), indicate that the result is statistically significantly different from the result in the same row (question) marked with the same letter. Other results not marked with a superscript are not statistically significantly different between age groups for that question.

Table A17: Correlations – Social costs (perceptions)

Social costs I (perceptions)		Protection of individual citizen	Protection of community	Source of excitement	Something to play with	Cause of discrimination	Source of stigma	Violates privacy	Violates right to control data	Potential misuse	Potential mis-interpretation	Limits right of free speech	Limits right of communi cation	Limits right of information
		Q8.1_1	Q8.1_2	Q8.1_3	Q8.1_4	Q8.1_5	Q8.1_6	Q8.1_7	Q8.1_8	Q8.1_9	Q8.1_10	Q8.1_11	Q8.1_12	Q8.1_13
Protection individual citizen	Q8.1_1	1.000												
Protection of community	Q8.1_2	0.756	1.000											
Source of excitement	Q8.1_3	0.104	0.092	1.000										
Something to play with	Q8.1_4	-0.078	-0.105	0.452	1.000									
Cause of discrimi-nation	Q8.1_5	-0.136	-0.163	0.311	0.248	1.000								
Source of stigma	Q8.1_6	-0.115	-0.084	0.311	0.247	0.662	1.000							
Violates privacy	Q8.1_7	-0.147	-0.162	0.230	0.222	0.471	0.544	1.000						
Violates right of control data	Q8.1_8	-0.194	-0.155	0.239	0.233	0.513	0.552	0.691	1.000					
Potential misuse	Q8.1_9	0.011	-0.070	0.211	0.188	0.417	0.474	0.475	0.449	1.000				
Potential mis-interpre-tation	Q8.1_10	-0.014	-0.075	0.190	0.234	0.486	0.483	0.555	0.543	0.583	1.000			
Limits right of free speech	Q8.1_11	-0.208	-0.203	0.304	0.266	0.510	0.665	0.614	0.548	0.450	0.426	1.000		
Limits right of communi-cation	Q8.1_12	-0.216	-0.188	0.287	0.299	0.549	0.571	0.573	0.527	0.421	0.441	0.775	1.000	
Limits right of information	Q8.1_13	-0.154	-0.191	0.259	0.226	0.499	0.511	0.506	0.508	0.335	0.380	0.654	0.717	1.000

Table A18: Correlations – Social costs (behaviour)

Social costs II (behaviour)		restricted activities	avoided locations	defensive measures	made fun of it	filed complaint	informed the media	counter-surveillance	info about technical protection	stopped accepting vouchers
		Q8.2_1	Q8.2_2	Q8.2_3	Q8.2_4	Q8.2_5	Q8.2_6	Q8.2_7	Q8.2_8	Q8.2_9
restricted activities	Q8.2_1	1.000								
avoided locations	Q8.2_2	0.469	1.000							
defensive measures	Q8.2_3	0.381	0.517	1.000						
made fun of it	Q8.2_4	0.263	0.201	0.301	1.000					
filed complaint	Q8.2_5	0.245	0.422	0.292	0.180	1.000				
informed the media	Q8.2_6	0.101	0.214	0.337	0.138	0.409	1.000			
counter-surveillance	Q8.2_7	0.397	0.375	0.380	0.296	0.610	0.366	1.000		
info about technical protection	Q8.2_8	0.401	0.281	0.248	0.130	0.246	0.156	0.182	1.000	
stopped accepting vouchers	Q8.2_9	0.257	0.240	0.166	0.099	0.238	0.136	0.145	0.470	1.000

Table A19: Correlations – Social costs (perceptions vs. behaviour)

Social costs III (perceptions vs behaviour)		restricted activities	avoided locations	defensive measures	made fun of it	filed complaint	informed the media	counter-surveillance	info about technical protection	stopped accepting vouchers
		Q8.2_1	Q8.2_2	Q8.2_3	Q8.2_4	Q8.2_5	Q8.2_6	Q8.2_7	Q8.2_8	Q8.2_9
Protection of individual citizen	Q8.1_1	-0.170	-0.231	-0.228	-0.155	-0.105	-0.161	-0.094	-0.075	-0.187
Protection of community	Q8.1_2	-0.274	-0.273	-0.274	-0.172	-0.128	-0.210	-0.058	-0.172	-0.226
Source of excitement	Q8.1_3	0.147	0.102	0.017	0.096	0.062	0.061	0.112	0.148	0.035
Something to play with	Q8.1_4	0.082	0.002	-0.055	0.038	-0.017	0.057	-0.079	-0.048	-0.056
Cause of discrimination	Q8.1_5	0.190	0.211	0.041	0.076	0.061	-0.054	0.025	0.122	0.158
Source of stigma	Q8.1_6	0.218	0.265	0.144	0.143	0.080	-0.027	0.098	0.180	0.339
Violates privacy	Q8.1_7	0.313	0.214	0.150	0.122	0.038	0.010	0.123	0.077	0.152
Violates right to control data	Q8.1_8	0.235	0.102	0.052	0.045	-0.005	-0.016	0.094	0.074	0.137
Potential misuse	Q8.1_9	0.167	0.208	0.060	0.076	-0.004	-0.103	-0.017	0.174	0.214
Potential misinterpretation	Q8.1_10	0.151	0.189	0.052	0.084	0.029	-0.100	0.023	0.043	0.159
Limits right of free speech	Q8.1_11	0.311	0.236	0.162	0.106	0.047	-0.067	0.048	0.189	0.146
Limits right of communi cation	Q8.1_12	0.371	0.279	0.141	0.104	0.147	0.051	0.136	0.173	0.149
Limits right of information	Q8.1_13	0.278	0.209	0.130	0.152	0.080	-0.059	0.021	0.146	0.167

Table A20: Correlations – Social benefits, usefulness and effectiveness of surveillance

			PROTECTION for individual citizen	PROTECTION for community
			Q8.1_1	Q8.1_2
Usefulness for **REDUCTION** of crime	**CCTV**	Q3.1_1	0.375	0.298
	database	Q3.1_2	0.366	0.24
	SNS	Q3.1_3	0.319	0.221
	financialT	Q3.1_4	0.284	0.204
	geolocat.	Q3.1_5	0.334	0.246
Usefulness for **DETECTION** of crime	**CCTV**	Q3.2_1	0.314	0.257
	database	Q3.2_2	0.369	0.223
	SNS	Q3.2_3	0.295	0.2
	financialT	Q3.2_4	0.309	0.25
	geolocat.	Q3.2_5	0.247	0.112
Usefulness for **PROSECUTION** of crime	**CCTV**	Q3.3_1	0.194	0.186
	database	Q3.3_2	0.324	0.267
	SNS	Q3.3_3	0.243	0.176
	financialT	Q3.3_4	0.316	0.293
	geolocat.	Q3.3_5	0.143	0.145
EFFECTIVENESS	**CCTV**	Q5.1.1_1	0.396	0.353
	database	Q5.1.1_2	0.439	0.346
	SNS	Q5.1.1_3	0.35	0.3
	financialT	Q5.1.1_4	0.312	0.328
	geolocat.	Q5.1.1_5	0.439	0.351

Table A21: Correlations – Social costs and privacy in surveillance

		Q5.1.2_1	Q5.1.2_2	Q5.1.2_3	Q5.1.2_4	Q5.1.2_5
	Social costs (perceptions)	**CTV**	**Databases**	**SNS**	**FinTrac**	**Geoloc.**
Q8.1_1	Protection individual citizen	-0.214	-0.293	-0.271	-0.162	-0.203
Q8.1_2	Protection of community	-0.113	-0.204	-0.217	-0.152	-0.120
Q8.1_3	Source of excitement	0.160	0.137	0.173	0.115	0.183
Q8.1_4	Something to play with	0.158	0.184	0.201	0.218	0.235
Q8.1_5	Cause of discrimination	0.277	0.405	0.383	0.283	0.362
Q8.1_6	Source of stigma	0.376	0.480	0.436	0.335	0.450
Q8.1_7	Violates privacy	0.318	0.503	0.430	0.381	0.424
Q8.1_8	Violates right of control data	0.269	0.405	0.400	0.334	0.306
Q8.1_9	Potential misuse	0.147	0.251	0.223	0.209	0.253
Q8.1_10	Potential misinterpretation	0.225	0.323	0.294	0.283	0.312
Q8.1_11	Limits right of free speech	0.349	0.482	0.417	0.362	0.443
Q8.1_12	Limits right of communication	0.392	0.520	0.459	0.389	0.444
Q8.1_13	Limits right of information	0.322	0.407	0.434	0.286	0.363
	Social costs (behaviour)					
Q8.2_1	restricted activities	0.268	0.214	0.266	0.204	0.249
Q8.2_2	avoided locations	0.357	0.235	0.266	0.243	0.285
Q8.2_3	defensive measures	0.273	0.139	0.220	0.208	0.251
Q8.2_4	made fun of it	0.269	0.255	0.262	0.191	0.229
Q8.2_5	filed complaint	0.081	0.040	0.141	0.104	0.137
Q8.2_6	informed the media	0.075	0.021	0.041	0.078	0.106
Q8.2_7	counter-surveillance	0.176	0.128	0.156	0.103	0.196
Q8.2_8	info about technical protection	0.107	0.090	0.052	0.055	0.096
Q8.2_9	stopped accepting vouchers	0.164	0.119	0.149	0.089	0.202

Table A22: Correlations – Usefulness vs. effectiveness of surveillance

			EFFECTIVENESS against crime				
			CCTV	**Database**	**SNS**	**FinancT**	**Geoloc.**
			Q5.1.1_1	Q5.1.1_2	Q5.1.1_3	Q5.1.1_4	Q5.1.1_5
Usefulness for	**REDUCTION**	**CCTV**	Q3.1_1	0.478	0.271	0.339	0.256	0.369
		database	Q3.1_2	0.172	0.548	0.339	0.333	0.508
		SNS	Q3.1_3	0.273	0.446	0.604	0.327	0.482
		financT	Q3.1_4	0.189	0.428	0.355	0.562	0.439
		Geoloc.	Q3.1_5	0.265	0.476	0.383	0.360	0.652
	DETECTION	**CCTV**	Q3.2_1	0.493	0.195	0.291	0.304	0.328
		database	Q3.2_2	0.183	0.587	0.415	0.361	0.457
		SNS	Q3.2_3	0.238	0.454	0.636	0.355	0.507
		financT	Q3.2_4	0.286	0.396	0.446	0.550	0.422
		Geoloc.	Q3.2_5	0.171	0.400	0.330	0.341	0.569
	PROSECUTION	**CCTV**	Q3.3_1	0.440	0.096	0.131	0.284	0.187
		database	Q3.3_2	0.199	0.442	0.348	0.355	0.418
		SNS	Q3.3_3	0.277	0.248	0.444	0.318	0.314
		financT	Q3.3_4	0.281	0.326	0.346	0.517	0.369
		Geoloc.	Q3.3_5	0.288	0.266	0.248	0.287	0.470

Table A23: Correlations – Security and happiness

				Feeling of **HAPPINESS**					Happiness about **NOT KNOWING**
			Feeling of **SECURITY**	**CCTV**	**SNS**	**Database**	**FinancT**	**Geoloc.**	
			Q4.3	Q5.3_1	Q5.3_2	Q5.3_3	Q5.3_4	Q5.3_5	Q5.4
Feeling of **SECURITY**		Q4.3	1.000						
Feeling of **HAPPINESS**	**CCTV**	Q5.3_1	-0.299	1.000					
	SNS	Q5.3_2	-0.288	0.417	1.000				
	Database	Q5.3_3	-0.285	0.424	0.626	1.000			
	FinancT	Q5.3_4	-0.205	0.360	0.449	0.608	1.000		
	Geoloc.	Q5.3_5	-0.279	0.535	0.535	0.622	0.487	1.000	
Happiness about **NOT KNOWING**		Q5.4	-0.270	0.399	0.438	0.471	0.277	0.424	1.000

Table A24: Correlations – Impact on privacy and feelings of security, trust and control

		NEGATIVE IMPACT on PRIVACY				
		CCTV	database	SNS	financialT	geolocat.
		Q5.1.2_1	Q5.1.2_2	Q5.1.2_3	Q5.1.2_4	Q5.1.2_5
Feeling of security	Q4.3	-0.134	-0.251	-0.292	-0.190	-0.209
Feeling of control I	Q4.4.1	-0.049	-0.136	-0.142	-0.12	-0.142
Feeling of control II	Q4.4.2	-0.127	-0.147	-0.061	-0.175	-0.095
Trust I	Q4.5.1	-0.165	-0.258	-0.233	-0.218	-0.224
Trust II	Q4.5.2	-0.176	-0.219	-0.203	-0.179	-0.145

Table A25: Correlations – Feelings of security, trust and control vs. effectiveness of laws

		Knowledge of laws	Effective-ness of laws	Feeling of security	Feeling of control I	Feeling of control II	Trust I	Trust II
		Q4.1	Q4.2	Q4.3	Q4.4.1	Q4.4.2	Q4.5.1	Q4.5.2
Knowledge of laws	Q4.1	1.000						
Effectiveness of laws	Q4.2	0.287	1.000					
Feeling of security	Q4.3	0.084	0.471	1.000				
Feeling of control I	Q4.4.1	0.201	0.268	0.175	1.000			
Feeling of control II	Q4.4.2	0.150	0.189	0.214	0.580	1.000		
Trust I	Q4.5.1	0.164	0.341	0.299	0.542	0.416	1.000	
Trust II	Q4.5.2	0.058	0.308	0.214	0.383	0.545	0.554	1.000

Table A26: Correlations – Feelings of security, trust and control vs. effectiveness of surveillance measures

		EFFECTIVENESS				
		CCTV	database	SNS	financialT	geolocat.
		Q5.1.1_1	Q5.1.1_2	Q5.1.1_3	Q5.1.1_4	Q5.1.1_5
Feeling of security	Q4.3	0.262	0.32	0.259	0.317	0.377
Feeling of control I	Q4.4.1	0.029	0.288	0.208	0.171	0.171
Feeling of control II	Q4.4.2	0.056	0.261	0.207	0.184	0.195
Trust I	Q4.5.1	0.118	0.263	0.244	0.202	0.198
Trust II	Q4.5.2	0.14	0.313	0.295	0.216	0.214

Appendix B – Questionnaire

Q0.1 Country of Residence

1. Austria
2. Belgium
3. Bulgaria
4. Croatia
5. Cyprus
6. Czech Republic
7. Denmark
8. Estonia
9. Finland
10. France
11. Germany
12. Greece
13. Hungary
14. Ireland
15. Italy
16. Latvia
17. Lithuania
18. Luxembourg
19. Malta
20. Netherlands
21. Norway
22. Poland
23. Portugal
24. Romania
25. Slovakia
26. Slovenia
27. Spain
28. Sweden
29. United Kingdom
30. Other _____ *(please write in)*

Q0.2 Age

☐ years

Q0.3 Gender

1. Female

2. Male
3. Other

Q1 Have you heard of the use of any of the below for the purpose of monitoring, observing or tracking of people's behaviour, activities or personal information?

1. Biometric data, e.g. analysis of fingerprints, palm prints, facial or body features
2. "Suspicious" behaviour, e.g. automated detection and analysis of raised voices, facial expressions, aggressive gestures
3. Data and traffic on the internet, e.g. Deep Packet/Content Inspection
4. Databases containing personal information, e.g. searching state pension databases, or customer databases of private companies
5. Online communication, e.g. social network analysis, monitoring of chat rooms or forums
6. Telecommunication, e.g. monitoring of phone calls or SMS
7. Electronic tagging / Radio Frequency Identification (RFID), e.g. tracking geolocation with electronic chips implanted under the skin or in bracelets
8. Global Positioning Systems (GPS), e.g. tracking geolocation of cars or mobile phones
9. CCTV cameras, e.g. in public places, airports or supermarkets
10. Financial information, e.g. tracking of debit/credit card transactions

From now on, in all questions, the word "surveillance" is used for the monitoring, observing or tracking of people's behaviour, activities or personal information.

Q2 What reasons for the setting up of surveillance do you know of?

1. The reduction of crime
2. The detection of crime
3. The prosecution of crime
4. Control of border-crossings
5. Control of crowds
6. Other *(please write in)* _____
7. I Don't know of any reasons.

Q3.1 How useful in general do you think the following types of surveillance are for the <u>reduction</u> of crime?

CCTV cameras	1 Not at all useful	2	3	4	5 Very useful	I don't know
Surveillance using databases containing personal information	1 Not at all useful	2	3	4	5 Very useful	I don't know
Surveillance of online social networking	1 Not at all useful	2	3	4	5 Very useful	I don't know
Surveillance of financial transactions	1 Not at all useful	2	3	4	5 Very useful	I don't know
Geolocation surveillance (Using mobile phones, GPS, electronic tagging, or RFID to determine the location of the devices and the devices' owners)	1 Not at all useful	2	3	4	5 Very useful	I don't know

Q3.2 How useful in general do you think the following types of surveillances are for the <u>detection</u> of crime?

CCTV cameras	1 Not at all useful	2	3	4	5 Very useful	I don't know
Surveillance using databases containing personal information	1 Not at all useful	2	3	4	5 Very useful	I don't know
Surveillance of online social networking	1 Not at all useful	2	3	4	5 Very useful	I don't know
Surveillance of financial transactions	1 Not at all useful	2	3	4	5 Very useful	I don't know
Geolocation surveillance (Using mobile phones, GPS, electronic tagging, or RFID to determine the location of the devices and the devices' owners)	1 Not at all useful	2	3	4	5 Very useful	I don't know

Q3.3 How useful in general do you think the following types of surveillance are for the <u>prosecution</u> of crime?

CCTV cameras	1 Not at all useful	2	3	4	5 Very useful	I don't know
Surveillance using databases containing personal information	1 Not at all useful	2	3	4	5 Very useful	I don't know
Surveillance of online social networking	1 Not at all useful	2	3	4	5 Very useful	I don't know
Surveillance of financial transactions	1 Not at all useful	2	3	4	5 Very useful	I don't know
Geolocation surveillance (Using mobile phones, GPS, electronic tagging, or RFID to determine the location of the devices and the devices' owners)	1 Not at all useful	2	3	4	5 Very useful	I don't know

Q4.1 How much do you know about the laws and regulations of your country regarding the protection of your personal information gathered via surveillance measures?
1=I don't know anything about such laws and regulations, 5=I am very well informed

Q4.2 How effective do you find these laws and regulations?
1=not effective at all, 5=very effective, I don't know

Q4.3 How secure does the presence of surveillance measures make you feel?
1=very insecure, 5=very secure, I don't know

Q4.4.1 How much control do you think you have over the processing of your personal information gathered via <u>government agencies</u>?
1=no control, 5=full control, I don't know

Q4.4.2 How much control do you think you have over the processing of your personal information gathered via <u>private companies</u>?
1=no control, 5=full control, I don't know

Q4.5.1 How much do you trust <u>government agencies</u> that they protect your personal information gathered via surveillance measures?
1=no trust, 5=complete trust, I don't know

Q4.5.2 How much do you trust <u>private companies</u> that they protect your personal information gathered via surveillance measures?
1=no trust, 5=complete trust, I don't know

Q5.1.1 Please indicate the extent to which you agree or disagree with the following statements clicking on the point on the scale that best represents your views.
(1=disagree, 7=agree, I don't know)

Q5.1.1.1 CCTV is an effective way to protect against crime.
Q5.1.1.2 Surveillance utilising databases containing personal information is an effective way to protect against crime.
Q5.1.1.3 Surveillance of online social-networking is an effective way to protect against crime.
Q5.1.1.4 Surveillance of financial transactions is an effective way to protect against crime.
Q5.1.1.5 Geolocation surveillance using mobile phones, GPS, electronic tagging, or RFID is an effective way to protect against crime.

Q5.1.2 Please indicate the extent to which you agree or disagree with the following statements clicking on the point on the scale that best represents your views.
(1=disagree, 7=agree, I don't know)

Q5.1.2.1 CCTV aimed at protection against crime has a negative impact on my privacy.
Q5.1.2.2 Surveillance utilising databases containing personal information aimed at protection against crime has a negative impact on my privacy.
Q5.1.2.3 Surveillance of online social-networking aimed at protection against crime has a negative impact on my privacy.
Q5.1.2.4 Surveillance of financial transactions aimed at protection against crime has a negative impact on my privacy.
Q5.1.2.5 Geolocation surveillance using mobile phones, GPS, electronic tagging, or RFID aimed at protection against crime has a negative impact on my privacy.

Q5.1.3 Would you be willing to accept payment as compensation for greater invasion of your privacy, using:

	Yes	No	I don't know
Surveillance via CCTV cameras			
Surveillance of online social networks			
Surveillance utilising databases containing personal information			
Surveillance of financial transactions			
Geolocation surveillance (Using mobile phones, GPS, electronic tagging, or RFID to determine the location of the devices and the devices' owners)			

Q5.2.1 Which of the following best describes you?

1. I never notice CCTV cameras.
2. I rarely notice CCTV cameras.
3. I sometimes notice CCTV cameras.
4. I often notice CCTV cameras.
5. I always notice CCTV cameras.
6. I don't know.

Q5.2.2 In your opinion, how often do the following types of surveillance take place in the country where you live?

	Never happens	Rarely happens	Sometimes happens	Often happens	Happens all the time	I don't know
Surveillance via CCTV cameras						
Surveillance of online social networks						
Surveillance utilising databases containing personal information						
Surveillance of financial transactions						
Geolocation surveillance (Using mobile phones, GPS, electronic tagging, or RFID)						

Q5.3 How happy or unhappy do you feel about the following types of surveillance?

	Very happy	Happy	Neither happy nor unhappy	Unhappy	Very unhappy	I don't know
CCTV cameras						
Surveillance of online social networks						
Surveillance utilising databases containing personal information						
Surveillance of financial transactions						
Geolocation surveillance (Using mobile phones, GPS, electronic tagging, or RFID)						

Q5.4 Surveillance may take place without people knowing about it. How do you feel about this?

1. I feel very happy about this.
2. I feel happy about this.
3. I feel neither happy nor unhappy about this.
4. I feel unhappy about this.
5. I feel very unhappy about this.
6. I don’t know.

Q6.1 In which of the following locations or events would you find the different types of surveillance for fighting crime acceptable?

	CCTV	**Geolocation surveillance** (Using mobile phones, GPS, electronic tagging, or RFID to determine the location of the devices and the devices' owners)
Public services (e.g. local council offices)	□ Acceptable □ Unacceptable □ I don't know	□ Acceptable □ Unacceptable □ I don't know
Private companies (e.g. banks)	□ Acceptable □ Unacceptable □ I don't know	□ Acceptable □ Unacceptable □ I don't know
Workplace	□ Acceptable □ Unacceptable □ I don't know	□ Acceptable □ Unacceptable □ I don't know
Schools / universities	□ Acceptable □ Unacceptable □ I don't know	□ Acceptable □ Unacceptable □ I don't know
Clinics and hospitals	□ Acceptable □ Unacceptable □ I don't know	□ Acceptable □ Unacceptable □ I don't know
Airports	□ Acceptable □ Unacceptable □ I don't know	□ Acceptable □ Unacceptable □ I don't know
Public transport (Railway, subway, buses, taxis etc.)	□ Acceptable □ Unacceptable □ I don't know	□ Acceptable □ Unacceptable □ I don't know
City centres	□ Acceptable □ Unacceptable □ I don't know	□ Acceptable □ Unacceptable □ I don't know
Specific areas that experience increased crime rates	□ Acceptable □ Unacceptable □ I don't know	□ Acceptable □ Unacceptable □ I don't know
Urban spaces in general	□ Acceptable □ Unacceptable □ I don't know	□ Acceptable □ Unacceptable □ I don't know
Mass events (concerts, football games etc.)	□ Acceptable □ Unacceptable □ I don't know	□ Acceptable □ Unacceptable □ I don't know
The street/neighbourhood where I live	□ Acceptable □ Unacceptable □ I don't know	□ Acceptable □ Unacceptable □ I don't know

Q6.2 In your opinion is the money allocated to government agencies for carrying out surveillance for the purpose of fighting crime in your country

(1=far too little, 2= too little, 3=just right, 4=too much, 5=far too much, 9=I don't know)

Q7.1 Please indicate the extent to which you believe the following practices of <u>government agencies</u> for fighting crime are acceptable or not acceptable.
You may choose more than one option if applicable.

	Fully accept-able in all circum-stances	Acceptable only if the citizen is suspected of wrong-doing	Acceptable if the citizen is suspected of wrong-doing and the surveillance is legally authorised	Acceptable if the citizen is informed	Acceptable if the citizen has given consent	Not acceptable in any circum-stances	I don't know
Government agencies share a citizen's personal information gathered via surveillance measures **with other government agencies**							
Government agencies share a citizen's personal information gathered via surveillance measures **with foreign governments**							
Government agencies share a citizen's personal information gathered via surveillance measures **with private companies**							

Q7.2 Please indicate the extent to which you believe the following practices of <u>private companies</u> for fighting crime are acceptable or not acceptable.
You may choose more than one option if applicable.

	Fully acceptable in all circumstances	Acceptable only if the citizen is suspected of wrongdoing	Acceptable if the citizen is suspected of wrongdoing and the surveillance is legally authorised	Acceptable if the citizen is informed	Acceptable if the citizen has given consent	Not acceptable in any circumstances	I don't know
Private companies share a citizen's personal information gathered via surveillance measures **with government agencies**							
Private companies share a citizen's personal information gathered via surveillance measures **with foreign governments**							
Private companies share a citizen's personal information gathered via surveillance measures **with other private companies**							

Q8.1 Please indicate the extent to which you agree or disagree with the following statements clicking on the point on the scale that best represents your views.
(1=disagree, 7=agree, I don't know)

Q8.1.1 Surveillance provides protection for the individual citizen.
Q8.1.2 Surveillance provides protection of the community.
Q8.1.3 Surveillance can be a source of personal excitement.
Q8.1.4 Surveillance can be something to play with.
Q8.1.5 Surveillance may cause discrimination towards specific groups of society.
Q8.1.6 Surveillance may be a source of stigma.
Q8.1.7 Surveillance may violate a person's privacy.
Q8.1.8 Surveillance may violate citizens' right to control whether information about them is used.
Q8.1.9 There is a potential that information gathered via surveillance could be intentionally misused by those who collect or process the data.
Q8.1.10 There is a potential that information gathered via surveillance could be misinterpreted by those who collect or process the data.
Q8.1.11 Surveillance may limit a citizen's right of expression and free speech.
Q8.1.12 Surveillance may limit a citizen's right of communication.
Q8.1.13 Surveillance may limit a citizen's right of information.

Q8.2 To what extent has your awareness of surveillance changed your personal behaviour? Please indicate the extent to which you agree or disagree with the following statements clicking on the point on the scale that best represents your views.
(1=disagree, 7=agree, I don't know)

Q8.2.1 I have restricted my activities or the way I behave.
Q8.2.2 I have avoided locations or activities where I suspect surveillance is taking place.
Q8.2.3 I have taken defensive measures such has hiding my face, faking my data, or incapacitating the surveillance device.
Q8.2.4 I have made fun of it.
Q8.2.5 I have filed a complaint with the respective authorities.
Q8.2.6 I have informed the media.
Q8.2.7 I have promoted or participated in collective actions of counter-surveillance, such as using mobile phones to document the behaviour of police and security forces.
Q8.2.8 I have kept myself informed about technical possibilities to protect my personal data.
Q8.2.9 I have stopped accepting discounts or vouchers if they are in exchange for my personal data.

Q9 Demographics

This section relates to information about you. It may be left blank but it would greatly assist our research if you do complete it. If you do not wish to answer these questions please click on the "SUBMIT" button at the bottom of the screen. Thank you.

Q9.1 What is your highest level of education?

1. No formal schooling
2. Primary school
3. Secondary school/High School
4. Tertiary education (University, Technical College, etc.)
5. Post-graduate

Q9.2 Would you say you live in an area with increased security risks?

1. Yes
2. No
3. Not sure/don't know

Q9.3 How often do you usually travel abroad per year?

1. Up to once a year
2. 2-5 times a year
3. 6-10 times a year
4. More than 10 times a year

Q9.4 How often do you usually visit a mass event (concert, sports event, exhibition/fair etc.) per year?

1. Up to once a year
2. 2-5 times a year
3. 6-10 times a year
4. More than 10 times a year

Q9.5 If you make use of the internet, for which purposes do you use it:

1. To communicate (e.g. by email)
2. Social networking
3. Online shopping
4. Information search
5. Internet banking
6. E-government services
7. I don't use the internet